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SOCIAL SECURITY BULLETIN

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The Board of Trustees reports each year on the current and projected financial condition of the Social Security Program, which is financed through two separate trust funds: The Old-Age and Survivors Insurance Trust Fund and the Disability Insurance Trust Fund. The introduction and overview presented here is excerpted from the 2010 annual report, which is the 70th such report.

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THE ROLE OF BEHAVIORAL ECONOMICS AND BEHAVIORAL DECISION MAKING IN AMERICANS' RETIREMENT SAVINGS DECISIONS

by Melissa A. Z. Knoll*

Traditional economic theory posits that people make decisions by maximizing a utility function in which all of the relevant constraints and preferences are included and weighed appropriately. Behavioral economists and decision-making researchers, however, are interested in how people make decisions in the face of incomplete information, limited cognitive resources, and decision biases. Empirical findings in the areas of behavioral economics and judgment and decision making (JDM) demonstrate departures from the notion that man is economically rational, illustrating instead that people often act in ways that are economically suboptimal. This article outlines findings from the JDM and behavioral-economics literatures that highlight the many behavioral impediments to saving that individuals may encounter on their way to financial security. I discuss how behavioral and psychological issues, such as self-control, emotions, and choice architecture can help policymakers understand what factors, aside from purely economic ones, may affect individuals' savings behavior.

Introduction

Traditional economic theory posits that people make decisions by maximizing a utility function in which all of the relevant constraints and preferences are included and weighed appropriately (Simon 1959). Traditional theory assumes that individuals have full information and are able to process this information, that individuals are rational decision makers, and that individuals' preferences are well-defined and constant over time (Becker 1962; Thaler 1990). Behavioral economists and decision-making researchers question these assumptions, however, and are interested in how people make decisions in the face of incomplete information, limited cognitive resources, and the decision biases to which individuals often fall prey (for example, Thaler 1990, 1999; Tversky and Kahneman 1974). Empirical findings in the areas of judgment and decision making (JDM) and behavioral economics depart from the notion of man as economically rational, illustrating instead that people often act in ways that are economically suboptimal. This article outlines findings from the JDM and behavioral-economics

literatures that focus on elements of the retirement savings decision.

The reality facing today's workers—that Social Security will not, nor was it intended to, constitute the entirety of U.S. workers' retirement income (DeWitt 1996)—has highlighted the importance of personal financial responsibility. The growing number of employers offering defined contribution retirement plans such as 401(k)s in addition to, or in lieu of, traditional defined benefit or pension plans (EBRI 2007) further underscores the role of the individual in planning for his or her future financial well-being. Unfortunately, workers face a multitude of problems

Selected Abbreviations

EBRI	Employee Benefits Research Institute
IRA	individual retirement account
JDM	judgment and decision making
RSP	Retirement Security Project
SSA	Social Security Administration

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when making all kinds of decisions, both simple and complex.

Research in JDM and behavioral economics¹ offers insights into how individuals may behave when deciding if, how, and when to save for retirement. This article highlights key JDM and behavioral-economics findings whose implications can help policymakers understand which factors, aside from purely economic ones, may affect individuals' savings behavior. The concepts reviewed below fall loosely into four categories: informational issues, heuristics and biases, intertemporal choice, and the decision context (Exhibit 1). Each of these categories represents a class of potential impediments to future financial well-being.

**Exhibit 1.
Selected factors affecting individuals' savings behavior**

Category	Examples
Informational issues	<i>Ambiguity aversion</i> <i>Anecdotal evidence</i>
Heuristics and biases	<i>Rules of thumb</i> <i>Status quo bias</i> <i>Default effects</i>
Intertemporal choice	<i>Self-control</i> <i>Procrastination</i> <i>Hyperbolic discounting</i> <i>Emotions</i>
Decision context	<i>Reference dependence</i> <i>Choice bracketing</i> <i>Framing effects</i> <i>Choice architecture</i>

The first category deals with informational issues, such as *ambiguity aversion* (the tendency to avoid making decisions when some of the relevant information is unknown or unclear) and an overreliance on *anecdotal evidence*. Even if decision makers had complete and accurate information, however, empirical findings suggest that they would still make sub-optimal savings decisions as a result of issues related to the second category, heuristics and biases. The tendency for individuals to disproportionately endorse the status quo alternative (*status quo bias*) and the systematic influence of the default option on choice (*default effects*) are anomalies or biases unaccounted

for by traditional economic models. Additionally, individuals make use of heuristics, or *rules of thumb*, which are generally beneficial but can lead decision makers astray. The third category, intertemporal choice, involves issues of *self-control*, *procrastination*, *hyperbolic discounting* (that is, a change in preference as a future event draws closer), and *emotions* that can affect savings behavior. Finally, JDM and behavioral-economics research demonstrates the impact of the decision context on choice; this research highlights how *reference dependence* and simple changes in the way options are presented, considered, or arranged (*choice bracketing*, *framing effects*, and *choice architecture*) can have profound effects on the choices individuals ultimately make.

Awareness of these and other behavioral concepts can help policymakers anticipate and plan for potential behavioral responses not accounted for in traditional economic models. This literature review consists of three main sections. The first describes why JDM and behavioral-economics research is important for our understanding of savings behavior, particularly in the current economic climate. The second outlines findings from JDM and behavioral economics that fall into the four categories delineated above, citing relevant research and its implications for the savings decision. The third offers some directions for future research in the application of JDM and behavioral economics to the study of retirement saving.

The Relevance of Behavioral Economics and JDM in the Current Savings Climate

Even as Americans are being called upon to take charge of their financial well-being for retirement, studies have shown that people do not always act in their own best interest. A wealth of JDM and behavioral-economics research demonstrates a disconnect between intentions and behavior (for example, Loewenstein 1996; Mitchell and Utkus 2003; Thaler and Shefrin 1981), and between doing what we *ought* to do and what we *want* to do (for example, O'Connor and others 2002). Survey research on retirement savings suggests a similar disconnect. For example, in 2001, 82 percent of respondents to a Consumer Federation of America and Bank of America survey reported that they would like to save money and “build personal wealth,” yet 60 percent felt that the statement “I don’t think I’m saving enough for the future” described them well or very well (CFA/BOA 2001). Americans appear to want to make sound financial decisions: They want to spend less and save more. However,

Americans' actual savings represent less than 5 percent of their disposable income.² Furthermore, about 75 percent of 1996 Health and Retirement Survey respondents felt that they had not saved enough for retirement and would save more if they could start over again (NIA 2007). Research in behavioral economics and behavioral decision making seeks to explain why individuals often make suboptimal decisions, even when they have good intentions.

The recent economic downturn has caused many investors to worry about their retirement savings (EBRI 2009). Individuals heavily invested in equities have been most hard-hit, and a significant percentage of older investors is among this group. A February 2009 report from the Employee Benefit Research Institute (EBRI) indicated that almost a quarter (22 percent) of those aged 56–65 included in the EBRI/Investment Company Institute 401(k) database had 90 percent or more of their assets invested in equities. An additional 21 percent of participants in this age group had between 70 percent and 90 percent of their investments in equities (VanDerhei 2009). Investors are often encouraged to redistribute some of their retirement investments toward less-risky prospects as they age;³ the recommended allocation shift helps ensure that a potential stock market decline will not drastically reduce their retirement funds. With such recommendations in place, why did older investors with more than \$200,000 in retirement savings⁴ at year-end 2007 lose more than 25 percent of these funds in 2008 (VanDerhei 2009)?

An obvious answer is that these investors did not know about the recommendation, or lacked confidence to act if they did. Given the complexities involved in determining the optimal allocation of retirement investments, average investors should not be expected to formulate the “shift in equity” rule of thumb on their own. However, with the trend toward defined contribution plans, and the resulting increase in personal responsibility for retirement planning, the issue of financial literacy has received more attention in recent years. Moreover, 401(k)s and stock assets are not the only areas in which consumers must navigate through increasingly complicated financial systems, often to their own detriment. Previous research has shown, for example, that individuals make “financial mistakes” when dealing with credit card fees and interest payments, car loans, mortgages, and home equity lines of credit, to name a few (Agarwal and others 2006). Many institutions, both public and private, have stepped up their efforts to educate people

of all ages on various aspects of their financial well-being.⁵ Although enhancing financial literacy is an important step, improved knowledge may not guarantee sound financial decisions. Research suggests that even experts with vast knowledge in a particular domain are not immune to making erroneous judgments and decisions in that domain (Hutton and Klein 1999; Shanteau 1988; Shanteau and Stewart 1992). As explained below, numerous impediments to sound decision making can arise despite complete and accurate information.

Behavioral Economics, JDM, and the Savings Decision

This section discusses findings from the JDM and behavioral-economics literatures that can help explain factors affecting Americans' retirement savings decisions. The four categories highlighted below encompass potential obstacles to optimal retirement savings and aspects of the decision-making process that are unaccounted for by traditional economic theory.

The Impact of Incomplete and Erroneous Information on Savings Behavior

Research in JDM and behavioral economics suggests that the amount, source, and nature of the information individuals receive about saving are likely to influence savings decisions. Although the recent push toward improved financial literacy for all Americans is a positive step toward better financial decision making, research suggests that greater knowledge does not necessarily result in more optimal decision making (for example, Shanteau and Stewart 1992). Furthermore, financial literacy is far from universal in the United States; at present, many individuals do not understand even the most basic financial concepts. For example, using a module inserted into the 2004 Health and Retirement Survey, Lusardi and Mitchell (2005) found that only about half of a nationally representative sample of respondents aged 50 or older were able to answer simple questions about compounding interest and inflation. Consistent with the notion that a lack of financial knowledge can result in poor retirement savings decisions (Olsen and Whitman 2007), Lusardi and Mitchell observed that respondents who were more knowledgeable about financial information were also more likely to have engaged in financial planning.

Ambiguity aversion and competence. Lusardi and Mitchell's (2005) finding that greater financial knowledge and participation in financial planning were positively related underscores the connection

between information, intentions, and behavior. Included in Lusardi and Mitchell's questionnaire were questions about participants' financial preparations for retirement: whether or not the participants had ever calculated how much they would need to save for retirement, whether they had ever developed a retirement savings plan, and what tools (such as online calculators or worksheets) they had used to plan for retirement. The questionnaire also included a financial literacy measure to assess respondents' awareness of fundamental concepts needed to plan for future financial well-being. The financial literacy assessment suggested that many individuals do not have adequate knowledge to engage in sound planning. Could this lack of knowledge prevent people from even *attempting* to plan for retirement?

Research on decision making under ignorance has demonstrated that the type and amount of information individuals receive can, in fact, paralyze the decision-making process. For example, research has shown that people prefer options for which the risks are known to options for which the risks are unknown or unspecified, a tendency labeled ambiguity aversion.⁶ One stream of research emerging from the ambiguity aversion literature investigates the *competence hypothesis*; that is, how competence or knowledge in a relevant domain affects individuals' preferences. For example, Heath and Tversky (1991) found, contrary to the ambiguity aversion hypothesis, that participants did not prefer an option with known risks to an option with ambiguous risks when the options occurred within a familiar domain. In one of their experiments, participants who were knowledgeable about football (or politics) preferred to bet on their beliefs about the outcome of a football game (or a presidential election) to betting on a chance event with an equal probability. However, participants who knew little about football (or politics) preferred to bet on a chance event rather than on the outcome of the game (or election). Fox and Tversky (1995) and Fox and Weber (2002) suggest that this pattern of findings is based on *comparative ignorance*.

The comparative ignorance hypothesis posits that when individuals confront a choice, they compare their level of knowledge in the relevant domain to their knowledge in other domains or to others' knowledge in the relevant domain. This comparison, in turn, produces feelings of competence or ignorance; when a feeling of ignorance results, people judge the situation as ambiguous and seek to avoid it. Specifically, Fox and Tversky (1995, 587) argue that "people's confidence is undermined when they contrast their

limited knowledge about an event with their superior knowledge about another event, or when they compare themselves with more knowledgeable individuals."

The competence and comparative ignorance hypotheses suggest that ambiguity aversion arises from feelings of inadequacy in a particular domain. Thus, uncertainty about economic issues may lead individuals to avoid making financial decisions altogether. Lusardi and Mitchell (2005, 2007) conducted research on individuals' propensity to engage in financial planning that independently supports these hypotheses. In addition to finding that financial *knowledge* impacted respondents' involvement in financial planning, the authors found that individuals' *confidence* with retirement planning affected their likelihood of participating in financial planning activities. Specifically, Lusardi and Mitchell (2005) found that participants who answered "don't know" to the financial literacy questions were much less likely to engage in retirement planning than those who simply gave incorrect answers. Thus, although the authors did not set out to test the competence and comparative ignorance hypotheses, their findings support the hypotheses' predictions that individuals who lack confidence in the relevant domain (in this case, financial planning) tend to avoid making decisions.

The competence and comparative ignorance hypotheses address the role of subjective judgments, such as feelings of confidence, in decision making. Lusardi and Mitchell (2007) explored the validity of subjective feelings of financial competence by asking respondents from the RAND American Life Panel to assess their *own* financial knowledge. For comparison, respondents also answered questions designed to gauge their financial literacy and preparedness objectively. The authors found that self-assessed financial literacy was positively related to objective financial literacy.⁷ Thus, financial literacy, whether subjectively or objectively determined, appears to be a key factor in financial planning.

The link between confidence and ambiguity aversion has important implications for the types of communications financial institutions use to reach their clients. Heath and Tversky (1991) argue that one's feeling of competence within a domain is determined by the relationship between what one knows and what one *could* know, and that feelings of incompetence are exacerbated when relevant information that one does not possess or understand is made salient. One way to draw attention to an individual's lack of knowledge is to ask questions to which one does not know the

answers. For example, users of online retirement calculators may be asked to enter inflation estimates and wage growth assumptions.⁸ However, many people do not possess this type of knowledge (Lusardi and Mitchell 2005, 2007). Therefore, an individual who attempts to plan for retirement may walk away from the episode feeling more confused than before. Indeed, Agnew and Szykman (2005) found that “financial aptitude” interacted with certain aspects of retirement plan design; for example, lower-knowledge individuals were more likely to remain with the default option than were individuals with higher knowledge. The realization that there is a great deal of information that one does not understand, or of which one is unaware, can paralyze the decision-making process. This poses a potential problem for policymakers: Ensuring that all of the relevant information is available to those who want it and can use it, without driving away or confusing those who are less financially savvy, may be a difficult balance to strike.

Anecdotal evidence. As an alternative to avoiding the savings decision, ill-informed individuals may turn to others whom they consider more knowledgeable. The extremely long and complex tax code, for example, causes people to flock to professional tax preparers each April. There is little doubt that attempting to file one’s own taxes makes salient the wealth of information one could know but does not know, which may lead individuals to want to avoid the situation altogether. Similar feelings of incompetence likely arise when people attempt to choose retirement accounts and asset allocations; but whereas taxes must be filed annually, people can continually defer making savings decisions. Nevertheless, when one does decide to save for retirement, apprehension resulting from a lack of knowledge could arise. Measures put in place by some employers, such as automatic enrollment in individual retirement accounts (IRAs), allow individuals to begin investing without having to confront their lack of knowledge (for example, Thaler and Benartzi 2004). However, if investors are motivated to invest their funds more optimally than the default allocation, feelings of incompetence can surface upon attempting to learn about one’s finances.

To remedy this sense of inadequacy, investors often turn to professional advisors for help. However, professional advice often comes at a cost, leaving many lower-income individuals to rely on other sources for their information. Using the 2004 Survey of Consumer Finances, Olsen and Whitman (2007) found that individuals who save and whose household income

exceeds \$70,000 are the most likely to use formal financial advice, such as that from lawyers, bankers, or financial planners, while those making less than \$20,000 rely most heavily on informal advice, such as that from a friend or relative. Additionally, van Rooij, Lusardi, and Alessie (2007) demonstrated that individuals with low levels of financial literacy are more likely than the financially literate to rely on advice from friends and family when making financial decisions. Finally, Olsen and Whitman (2007) observed that between 45 and 50 percent of *all* reported savers in the Survey of Consumer Finances indicated using public sources, including television, radio, and the Internet, for investment advice.

With the prevalent availability and use of investment-related anecdotal evidence, it is important to address the potential effects of such information on the savings decision. Particularly in the current economic climate, individuals are often bombarded with abundant, but potentially superficial, financial information. The information disseminated on television—for example, on “The Suze Orman Show”—is not necessarily intended to be a one-size-fits-all recommendation; advice intended for those nearing retirement age may be significantly different from recommendations for young workers in their first job. Nevertheless, Orman’s “Can I Afford It?” show segment, in which the host gives tailored financial advice to callers hoping to be given the “go ahead” to purchase specific items, is wildly popular. As of May 2009, Orman’s viewership had increased over 22 percent since the same time the previous year (Dominus 2009), an indication that more people are interested in financial advice, and they are looking to public sources to find it.

The success of Orman’s show and, in particular, the popularity of the “Can I Afford It?” segment, is a testament to research showing that people are much more receptive to anecdotes and personal testimonials than they are to statistics (for example, Fagerlin, Wang, and Ubel 2005). Much of the research revealing a reliance on anecdotal information has focused on medical decisions (for example, Ubel, Jepson, and Baron 2001), but this reliance likely cuts across all domains. Medical decision-making researchers often find that patients’ treatment preferences are influenced by stories of people who have undergone similar treatments. Additionally, everyday examples of people’s tendency to place more weight on anecdotal evidence than on statistical evidence are not hard to find. For example, a driver whose friend died in a car accident because his fastened seat belt malfunctioned is less likely to

wear a seat belt than a driver who knows no such person—even though seat belts save thousands of lives each year. One reason commonly cited for the power of anecdotal evidence is that people can more easily identify with a specific real person than with an abstract “average” person (Jenni and Loewenstein 1997), whom people overwhelmingly believe themselves to be different from in many ways (for example, Alicke and others 1995). Additionally, individuals may find anecdotal evidence to be more convincing than relevant statistics, because people often do not understand how to accurately interpret statistical information (for example, Lipkus, Samsa, and Rimer 2001). Finally, anecdotes invoke strong emotions, which may alter individuals’ perceptions of risk (Loewenstein and others 2001).

All of these explanations for the influence of anecdotal evidence apply well to the financial domain. For example, when deciding how to allocate funds in their own retirement portfolios, people may ask friends how they allocated theirs. Even though the average person tends to make more money investing in stocks than in bonds in the long run, an investor whose friend has lost a lot of money in stocks may decide to invest in less risky options, so as not to follow in the friend’s unfortunate footsteps. People who do not understand the difference in risk that accompanies investing in one group of stocks over another are likely to find their friends’ and families’ advice and stories more convincing than the relevant statistics. Most applicable in the current financial climate are stories and anecdotes from depressed investors who have lost significant portions of their retirement funds. Such stories can evoke strong emotions in individuals trying to determine what to do with their own money. The strong, negative feelings prompted by anecdotal evidence may lead potential investors to infer greater investment risk than is warranted (for example, Lerner and Keltner 2000; Loewenstein and others 2001; Raghunathan and Pham 1999). Informal advice from friends, family members, and public media outlets can shape investors’ financial decisions, leading them to make potentially suboptimal choices.

Heuristics and Biases Influence Savings Behavior

Informational concerns collectively comprise only one piece of the retirement puzzle; they most certainly cannot account for all of the suboptimal decisions investors make in their quest for retirement security. Recall the EBRI report discussed earlier showing that about a quarter of 56- to 65-year-olds surveyed had more than

90 percent of their investments in equities, contrary to the “shift in equity” rule of thumb. If these individuals had been better educated about the importance of reducing asset risk as they moved closer to retirement, would they have been better off? JDM research in the heuristics-and-biases tradition suggests that, for a variety of reasons, people tend to distort information in meaningful and systematic ways. Furthermore, individuals often rely on *heuristics*, or rules of thumb, when making decisions;⁹ and although heuristics lead individuals down the right path most of the time (Gigerenzer 2008), their use also produces systematic and predictable judgment errors (Tversky and Kahneman 1974). As a result, the use of heuristics and the biases that result can lead to decision errors even in the presence of accurate and complete information.¹⁰

Rules of thumb and System 1 processing. Even if individuals do not expressly seek financial advice, they likely will acquire economic information incidentally. Any news program, radio talk show, newspaper, or magazine is almost certain to mention topics related to personal finances, and many dinner conversations with friends or family are bound to include some reference to the economy. JDM research has demonstrated that the ease or difficulty with which information can be brought to mind, as well as the frequency with which a piece of information has been encountered, affects people’s judgments. It is quite possible, then, that even incidental contact with financial information can influence people’s financial decisions. The *availability heuristic* (Tversky and Kahneman 1973, 1974) is the tendency for people to use the ease with which instances of a particular event or situation come to mind as an indication of the likelihood of the event occurring. As such, the amount of news coverage a certain event receives can help to shape people’s judgments regarding the likelihood of the same event or outcome happening to them. For example, early research showed people tend to wrongly estimate the incidence of homicide to be greater than that of suicide (Lichtenstein and others 1978), and such incorrect probability judgments have been tied directly to the number of words dedicated to relevant events in newspapers. This finding suggests that investors who hear many news reports (or one particularly vivid one) about future retirees losing large portions of their retirement savings may come to think that they are destined to meet the same fate. As a result, nervous investors may pull their money out of their retirement funds or shift their funds to less risky prospects. News programs rarely report on the scores of people whose

savings were not as hard-hit, and this biased reporting can lead viewers to believe that the probability of a negative outcome is far greater than it actually is (Combs and Slovic 1979). Similarly, the vividness of an entire news segment dedicated to “one man’s quest for survival in retirement,” for example, can help skew viewers’ estimates of the likelihood that the same outcome will befall them if they do not move all of their investments to no-risk savings accounts.¹¹

The *validity effect*—the finding that repeated statements are judged to be more valid (for example, Hasher, Goldstein, and Toppino 1977)—may also be relevant to the impact of news reports and family discussions on an individual’s financial behavior. Newscasts tend to report on hot topics such as “what to do with your 401(k),” and they tend to give the same solutions to the issues each time. This means that a viewer is likely to hear the same advice repeatedly. The validity effect describes how an individual might take as truth opinions expressed in a newscast that may or may not be true. Simply by repeating the same messages, news reports can influence the financial decisions an investor makes.

It may seem hard to believe that competent decision makers could be so easily influenced by the vividness of a story or the number of times they heard a news item, but psychological research suggests that people are prone to such heuristic “thinking” (Tversky and Kahneman 1974). People tend to reason intuitively—“going with their gut”—which results from *System 1 processing* (Stanovich and West 2000). System 1 processing is automatic, intuitive, quick, and emotional, while System 2 processing is more effortful, slow, and controlled. People typically rely on System 1 when they do not have the time or cognitive capacity to carefully process all of the available information. Because the time required for careful processing is typically scarce in a fast-paced and complex world, many researchers argue that people operate in System 1 most of the time (for example, Gilbert 2002), although System 2 can override System 1 in certain circumstances (Kahneman 2003).¹² System 1 and System 2 processing are further discussed later, but for now it is important to note that the tendency to process information quickly and intuitively can lead decision makers to be influenced by extraneous and emotion-laden factors.

Status quo bias. Recall the asset reallocation problem in which some investors do not follow the shift-in-equity rule of thumb. Research in behavioral economics and behavioral decision making suggests that, even

with full knowledge of recommended allocation strategies, investors will likely fail to reallocate their funds throughout their lives. Traditional economic theory cannot account for such suboptimal behavior, but a classic finding from the JDM literature does: Individuals exhibit the *status quo bias*. Simply put, when the opportunity exists either to do something or to do nothing, people tend to do nothing (Samuelson and Zeckhauser 1988). The average investor probably does not solve the asset allocation problem as an economist would, and may remain invested in too many equities too close to retirement. JDM and behavioral-economics research enables policymakers to anticipate this situation and formulate plans to combat it. For example, many retirement plans now offer life-cycle funds, mutual funds in which the time horizon of one’s savings goal determines the asset allocation; these funds allow allocations to shift over time, with little to no effort on the part of the investor (Schooley and Worden 1999). In essence, life-cycle funds allow investors to make more optimal allocations by simply doing nothing.¹³

In an early demonstration of the status quo bias, Samuelson and Zeckhauser (1988) found that, over their lifetimes, more than half of TIAA-CREF plan participants in 1987 had never changed their initial chosen asset allocation of 50 percent stocks and 50 percent bonds. Although these individuals likely had more stocks in their portfolio at retirement than is recommended, asset allocation is not the only example of the impact of the status quo bias on financial well-being. Automatic-enrollment plans, such as Thaler and Benartzi’s “Save More Tomorrow” (SMarT) plan, exploit individuals’ tendency to stick with the status quo. With automatic enrollment, employees enter into a savings plan by default and must take action to withdraw from the plan; few individuals exercise their right to opt out. In addition to automatic enrollment, the SMarT program also includes automatic increases in contribution rates following pay increases, as the status quo bias suggests that investors will fail to actively increase their contributions over time. These aspects of the SMarT program, along with some other key components, led to substantial increases in the savings rates of employees in three major companies (Thaler and Benartzi 2004). In another real-world example of the influence of automatic enrollment on subsequent participation in a 401(k) plan, Madrian and Shea (2001) found that 86 percent of employees in a large U.S. corporation participated in the company’s 401(k) plan when enrollment was automatic, as

compared to the 49 percent of employees who participated when they had to enroll actively.

In addition to observing the effects of the status quo bias on 401(k) participation, Madrian and Shea (2001) found differences in 401(k) contributions between those who were automatically enrolled and those who had to expressly elect enrollment. Specifically, those who participated in the 401(k) plan as a result of automatic enrollment contributed about 3 percent to the plan, while those who elected to participate before automatic enrollment was introduced contributed over 7 percent of their pay to the plan. Why should there be a difference in contribution rates between those who were automatically enrolled and those who had to actively enroll in the 401(k) plan? Not surprisingly, 3 percent was the default contribution rate under the automatic enrollment plan. The results from the naturalistic experiment reported by Madrian and Shea therefore highlight a different, but related, finding from research in behavioral decision making: defaults matter.

Default effects. Defaults have proven to have profound effects on individuals' behavior in a variety of contexts. For example, Johnson and Goldstein (2003) demonstrated the effects of defaults on participants' willingness to be organ donors and reported on the donation rates of countries adopting opt-in versus opt-out organ-donation policies. In all cases, countries whose residents have to opt in to organ donation show dramatically lower donation rates than those that assume residents want to donate while reserving the right to opt out. Researchers have observed similar default effects in the domain of automobile insurance. Johnson and others (1993) found that New Jersey and Pennsylvania motorists tended to stay with their respective states' insurance policy defaults regarding the right to sue. The authors observed that, as a result, 80 percent of New Jerseyans did not have the right to sue, while 75 percent of Pennsylvanians did.

Returning to the domain of retirement investment decisions, Choi and others (2004) reported that among three different companies, between 65 percent and 87 percent of employees participating in a 401(k) plan because of automatic enrollment tended to stick with the default contribution rate of 3 percent or less. The authors did find, however, that the effect of the default decreased over time. Nevertheless, by contributing the lower default rates to employer-sponsored 401(k) plans, employees often sacrifice substantial matching funds over time (Thaler and Benartzi 2004). From an economic perspective, differences in defaults should

have no bearing on individuals' decisions regarding whether to participate or how much to contribute to retirement saving plans; economically rational human beings should choose the option that maximizes their utility, regardless of the status quo and the default option. However, the research shows that default options and the status quo affect individuals' decisions in a variety of contexts.¹⁴ Policymakers who anticipate these effects have the unique opportunity to construct decision environments and design options that produce welfare-improving outcomes for individuals who choose simply to do nothing.

The implications of the status quo bias and default effects for retirement savings behavior are apparent, and policymakers have already begun to "harness the power of inertia" (Brookings Institution 2010) to encourage Americans to save. Although selecting savings-promoting defaults and automatically enrolling employees into retirement savings accounts are reliable ways to increase savings behavior, approximately 78 million employees (about half of the U.S. workforce) have no access to employer-sponsored retirement plans (Iwry and John 2009). For roughly half of the nation's employees, then, default effects and automatic enrollment are moot points. The Brookings Institution's Retirement Security Project (RSP) is attempting to change that by facilitating retirement savings for U.S. workers whose employers do not offer 401(k) plans (Iwry and John 2009). The RSP proposes creating mandatory automatic IRAs; employers with more than 10 employees would automatically deduct payroll funds and place them in the employee's account. Although enrollment in the IRA would be automatic, employees would have the opportunity to opt out of the plan at any time. Additionally, these IRAs would specify a default investment fund; however, the details of this aspect of the plan remain to be determined.

Intertemporal Choice and Saving

The automatic IRAs proposed by the RSP plainly make use of the behavioral decision-making research findings on status quo bias and default effects, but they also draw attention to another aspect of decision-making research, namely *self-control* and *procrastination*.

Self-control and procrastination. Only 8–10 percent of workers eligible for IRAs participate in such self-initiated plans, while nearly 70 percent of workers whose employers sponsor retirement plans, such as 401(k)s, choose to participate (Iwry and John 2009; Springstead and Wilson 2000). The need to save for

retirement is universal, so why should those with employer-sponsored savings plans save at such significantly higher rates than those who must save on their own? The transaction cost of making a deposit into an IRA likely is one reason for the discrepancy in enrollment rates, but it is not the whole story. Going to the bank is not so onerous that it would preclude millions of otherwise financially savvy individuals from saving for retirement. Likewise, although employers often offer an attractive partial match of employee contributions to the plans they sponsor, this difference between IRAs and 401(k)s cannot entirely account for the difference in participation rates; if it did, the participation rate in employer-sponsored plans with an employer match would be closer to 100 percent (Thaler and Sunstein 2008).¹⁵ Instead, opening one's own IRA may be akin to starting a weight-loss program. Not eating a tempting snack now in the pursuit of future weight loss is similar to reducing one's current income (thereby forfeiting some tempting purchases) in the pursuit of a comfortable retirement. The chronic dieter's promise to "start my diet on Monday" may be repeated countless times before the dieter finally decides to get serious and put down the cookie. Similarly, the chronic spender may tell herself she will enroll in a retirement savings plan when she receives her next paycheck, but repeatedly fails to submit the form or take the trip to the bank.¹⁶

Thaler and Shefrin (1981) describe this internal struggle as a conflict between a "farsighted *planner*" and a "myopic *doer*." The planner's main concern is utility over the lifetime, while the doer is only concerned with the present. In order to save adequately for retirement or successfully lose weight, the planner must manage the doer by creating incentives to act less myopically or by setting up rules that preclude short-sighted behavior. This underscores one critical benefit of automatic payroll deductions: Before an employee ever receives his or her paycheck, the money designated for retirement has already been deducted and deposited into the retirement account. Self-control has been removed from the equation. Additionally, automatic enrollment in a retirement account removes procrastination from the equation.¹⁷ The automatic IRA that the RSP proposes would likewise allow individuals whose employers do not offer retirement plans a way to circumvent the self-control and procrastination problems. Even without employer-matched contributions, employees enrolled in automatic IRAs can reap the benefits associated with retirement savings via payroll deduction.¹⁸

Hyperbolic discounting. One reason why self-control and procrastination issues impede saving for retirement is *hyperbolic discounting*. Again, people typically intend to forfeit small, immediate gains for larger rewards in the future, but they often fail to make the optimal choice at decision time (Kirby and Herrnstein 1995). For example, in the middle of the week, a dieter can say with confidence that she will start her diet on Monday. This is because the warm chocolate chip cookie that will tempt her on Monday (a smaller, sooner reward) *and* the weight loss that would result from not eating the cookie (a larger, later reward) are both in the future. However, on Monday, when the choice to eat the cookie is in the present and only a slimmer physique is in the future, the dieter is likely to eat the cookie. Such a preference reversal occurs because, contrary to the economic axiom of *stationarity* (Fishburn and Rubenstein 1982), individuals do not discount the future at a constant rate. Instead, people tend to discount the future in a hyperbolic fashion, such that the relative preferences for a larger, later reward and a smaller, sooner reward change with the passage of time. As the decision point for the two options draws nearer to the present, the decision maker values the small, immediate reward more than the larger future reward. Kirby and Herrnstein demonstrated this effect by varying participants' opportunities to receive pairs of real monetary awards or goods at various times in the future. As both options moved farther into the future, the experiment's subjects reversed their previous preference, and chose the larger, later reward over the smaller, earlier reward, illustrating hyperbolic discounting of time.¹⁹

Interestingly, individuals tend to recognize that they may forsake their long-term goals for instant gratification; as Laibson (1997) notes, people value self-control, though many feel they do not have enough of it. In recognizing this flaw in their own judgment, some individuals employ *precommitment strategies* to help them to accomplish their long-term goals. For example, one might set one's alarm clock an hour early with the intention of going for a morning jog. When staying in bed for an extra hour and a morning run are both in the future, the exercise is more highly valued. However, many individuals know that when the alarm sounds, staying in bed will be much more attractive than the promise of good health later. Some individuals, aware of and acting to overcome their dynamically inconsistent time preferences, will place the alarm clock across the room so that the tired, myopic self will have to get out of bed. Other examples of

precommitment strategies include Christmas clubs²⁰ and annual gym memberships. Saving for retirement involves a trade-off between more money in one's pay-check now and a more comfortable life in the future, much as weight loss involves a trade-off between sleeping in now and better health later. The nature of retirement savings, then, almost requires individuals to use precommitment devices. Payroll deduction is one such device. In fact, retirement accounts themselves serve as precommitment devices, inasmuch as they discourage impulsive behavior through penalties on early withdrawal. Laibson (1997, 445) describes such accounts as having "golden egg" properties; that is, they provide large long-term advantages at the expense of immediate benefits.

Emotions. Evidence of the effects of emotions on decision making is far too abundant to discuss in its entirety here. Emotions can affect which variables enter into one's decisions, the decision outcomes themselves, and postdecision variables, such as satisfaction with and adherence to the decision (for example, Baron 1992; Rick and Loewenstein 2008). Although a discussion of the role of emotions in financial decision making and savings behavior could apply to several sections in this article, I will narrow the discussion to emotions as they relate to intertemporal choice, and more specifically, self-control and hyperbolic discounting.²¹

Loewenstein, for example, argues that "visceral factors" such as drive states, cravings, moods, and physical pain can impact self-control. Loewenstein contends that visceral factors can produce effects similar to those engendered by hyperbolic discounting, albeit in a different way. As described above, hyperbolic discounting leads individuals to choose options that provide immediate gains over options that provide long-term benefits. Similarly, visceral factors can lead individuals to choose the option that offers instant gratification, but only when the item in question is physically proximal to the decision maker (Loewenstein, 1996). Citing Mischel's (1974) work on impulsivity in children, Loewenstein notes that when the children were made to choose between an immediate, smaller reward and a delayed, larger reward, the children found it more difficult to wait for the larger reward when either the immediate or the delayed reward was in the room with them. Loewenstein contends that the physical presence of either the smaller, immediate reward or the later, larger reward triggered the children's visceral response and the immediate desire for that reward, even if it was

smaller. Interestingly, simply showing a picture of the delayed reward did *not* trigger an impulsive choice, leading Loewenstein to conclude that the picture did not stimulate a visceral response.

More recently, neuroimaging studies have also demonstrated the role of emotions in hyperbolic discounting. McClure and others (2004) found increased activity in areas of the brain related to emotion when participants confronted the opportunity to receive an immediate reward, but not when they faced intertemporal choices that lacked an immediate option. Furthermore, when participants *did* choose larger, later rewards over smaller, immediate ones, regions of the brain associated with higher cognitive functions were more active than those associated with emotional responses. Through the innovative use of functional magnetic resonance imaging (fMRI), the authors were able to demonstrate that behavior consistent with a hyperbolic treatment of time may be driven by emotional responses to immediate rewards.

As discussed throughout this article, saving for retirement entails making financial decisions that deliver benefits in the future at the expense of immediate gratification. Gauging whether it is worth sacrificing pleasure in the present for future benefits requires decision makers to make predictions about their future happiness; to ask, for example, how will I feel if I have no money to do the things I want to do in retirement? Intertemporal choice, then, necessitates the evaluation of current emotions as well as emotions that will only be experienced in the future, when the consequences of one's earlier choices and decisions are realized. Researchers in JDM and behavioral economics have noted the difference between these "expected" and "immediate" emotions (Loewenstein and Lerner 2003; Loewenstein and others 2001) and have described both their unique and combined effects on the decision process (Rick and Loewenstein 2008). Immediate emotions, such as those brought about by visceral factors, may lead individuals to make decisions that are not in their future best interest; for example, the smell of freshly baked cookies may lead a dieter to forsake her long-term weight-loss goal. At the same time, expected emotions, which can arise when thinking about future outcomes, may help a dieter resist temptation; thinking about how badly she will feel *after* eating the cookie or how excited she will feel if she loses five pounds may help the dieter abstain.²²

One particularly important finding from the JDM literature relevant to expected emotions is that people often do not make accurate *affective forecasts*,²³ that

is, they do not correctly predict their future emotions. Specifically, individuals tend to imagine that the emotions resulting from a particular event will be more positive or negative than they actually turn out to be (Wilson and Gilbert 2003). Additionally, people believe that their predicted emotions, whether positive or negative, will last longer than they do in reality (Gilbert and others 1998). A related finding, termed *projection bias* (Loewenstein, O'Donoghue, and Rabin 2003), demonstrates that although individuals recognize that their "tastes" will change over time, they fail to appreciate the magnitudes of such changes (Conlin, O'Donoghue, and Vogelsang 2007).²⁴ As such, projection bias may lead individuals to make choices that are more extreme than they would otherwise prefer; for example, an individual choosing a vacation destination in the middle of a snowstorm may elect to visit an extremely warm location, only to find himself sweltering while actually on the trip (Loewenstein, O'Donoghue, and Rabin 2003). The popular saying "his eyes are bigger than his stomach" likely describes behavior borne from the projection bias. For intertemporal choices (choices over time), mispredictions of future emotions and tastes can lead to decisions that are disadvantageous to one's future self.

Decision Context Affects Savings Behavior

The way a particular decision is presented or the way individuals think about a particular decision can affect the ultimate choice (for example, Tversky and Kahneman 1981; Thaler and Sunstein 2008). Changing the way information is communicated or *framed* can lead to differing responses (Tversky and Kahneman 1981), and decision makers themselves can interpret information in various ways, also leading to differing choices (for example, Stanovich and West 2000). As described below, there are a number of findings in the JDM and behavioral-economics literatures demonstrating how various aspects of the decision context can significantly influence the savings decision.

Reference dependence, loss aversion, and perceptions of risk. As described above, the automatic transfer of funds from one's paycheck into a retirement account can aid in enforcing self-control. Automatic transfer also allows individuals to bypass the effects of *loss aversion*. Individuals do not evaluate their wealth in an absolute sense, but rather in reference to the status quo (Kahneman and Tversky 1979). The status quo establishes a reference point from which changes are evaluated as gains or losses (*reference dependence*). Loss aversion refers to the empirical finding that losses

hurt roughly twice as much as equivalent gains feel good (Tversky and Kahneman 1991).

The application of reference dependence and loss aversion to retirement saving via payroll deduction is summarized by a simple principle: If you don't have it, you can't lose it. An employee's reference point for income likely is net earnings, or take-home pay. If the employee does not have retirement savings automatically deducted, then any retirement account contributions must be actively removed from take-home earnings, resulting in a perceived loss from the status quo. However, if this employee earmarks a fraction of his or her earnings for automatic transfer into a retirement account, he or she likely will not get a sense of "losing" spending money; retirement savings will already be subtracted from gross earnings, just like federal and state taxes and health insurance premiums. With retirement contributions automatically deducted, the slightly lower net pay becomes the new status quo or the reference point.

Loss aversion, therefore, may not be problematic for employees who have access to automatic payroll deductions, but it poses a problem for employees who must save on their own. For individuals considering saving equal dollar amounts, the experience of an employee with no access to automatic deductions is quite different from that of an employee with such access. For the former, saving seems painful, while for the latter, saving is relatively easy, even though the final result is the same. Such is the significance of the reference point.

Reference points determine whether an individual perceives a particular outcome as a gain or a loss, and encoding an outcome as a gain or a loss can have profound behavioral effects. The reference point's role in partitioning the range of possible outcomes into gains or losses also influences an individual's risk preference, which can, in turn, affect behavior. Studies in both traditional and behavioral economics have demonstrated *risk aversion*, which is the preference for a sure thing over a gamble with a higher expected value (Kahneman and Tversky 1984). Economists explain risk aversion in terms of expected utility maximization using a concave utility-of-wealth function (Rabin and Thaler 2001). Behavioral economists, however, view risk aversion as more complex—for example, recognizing that people have different risk preferences for gains and losses. Essentially, the reference point transforms the utility function from a simple concave function defined on total wealth to an S-shaped function defined on gains and losses; this

S-shaped function (the *prospect theory value function*) is concave for gains and convex for losses (Kahneman and Tversky 1979, 1984). Consistent with the traditional economic explanation of risk aversion, JDM and behavioral-economics research has found that individuals are risk-averse in the region of gains, where the function is concave. However, in the loss region, where the S-shaped function is convex, individuals tend to display risk-seeking behavior (Kahneman and Tversky 1984).

Taken together, reference points and differences in risk preference for gains and losses are important for retirement savings because they can influence individuals' investment decisions. For example, the *disposition effect*, which is the tendency for investors to sell winning stocks too soon and hold onto losing stocks too long (Odean 1998; Shefrin and Statman 1985), can be explained by individuals' asymmetric risk aversion on either side of the reference point. In the case of stocks, it is reasonable to assume that an investor's reference point is the purchase price of the stock (Odean 1998); if the value falls below the purchase price, the investor will perceive it as a loss, and if the stock rises above the purchase price, the investor will code it as a gain. As such, investors will tend to exhibit risk-averse behavior if the stock has increased in value and risk-seeking behavior if the value has gone down. Behaviorally, this difference in risk perception leads investors to want to sell winning stocks too soon, thereby realizing the sure gain and avoiding a future loss, and to want to hold onto losing stocks too long, persisting with the risky prospect.

JDM and behavioral-economics researchers have documented many examples of the impact of reference points on risk preferences and behavior, including the "house money effect" (greater risk-seeking after a realized gain) and "break-even effects" (opportunities allowing individuals to break even are more appealing following a realized loss) in gambling (Thaler and Johnson 1990). More recently, researchers have explored the effects of reference point adaptation (for example, Arkes and others 2008), which is a shift in the reference point in the direction of a previous gain or loss, as well as the effects that expectations can have on such reference point shifts (Kőszegi and Rabin 2006; Yogo 2008). With the disposition effect as an example, it is clear how adapting the reference point to realized gains or losses can change the way investors evaluate their holdings. For instance, if a stock share originally purchased for \$20 increases in value to \$30, the investor may consider the new stock

price of \$30 to be the reference point. As such, the \$30 stock price no longer represents a *gain* and is unlikely to induce the investor to choose the risk-averse option to sell the stock. Similarly, if the stock price falls in value to \$10, and this lower value is deemed to be the new reference point, the investor will not consider the \$10 stock to be a *loss*, and will not display the risk-seeking behavior of holding onto it (Arkes and others 2008). The significance of the reference point's ability to transform individuals' perceptions and affect their judgments and decisions cannot be overstated.

Choice bracketing. Individuals who live "paycheck to paycheck" or otherwise feel that they have no disposable income may be unlikely to save for retirement. For them, reluctance to save may stem from narrow *choice bracketing*. Choice bracketing refers to the way in which people combine individual choices when selecting a course of action. Considering only one or two choices in a choice set is *narrow* bracketing, and considering many choices is *broad* bracketing (Read, Loewenstein, and Rabin 1999). For example, if a consumer considers the cost of a single specialty coffee ("My coffee costs \$3.95") she is bracketing *narrowly*, but if she considers the coffee's impact on her yearly spending ("My coffee costs me \$1,441.75 a year!"), she is bracketing *broadly*. Choice bracketing can have major implications for the types of decisions people make, as illustrated by the "pennies-a-day" (PAD) phenomenon (Gourville 1998). Marketers use the PAD strategy when they urge consumers to bracket a payment narrowly rather than broadly, enabling one to view a relatively large payment (such as \$365) as a seemingly trivial expense ("just a dollar a day!"). Retailers and charities often use PAD tactics to induce consumers or donors to spend their money, and previous research exploring the PAD strategy has demonstrated the effectiveness of such manipulations in apartment rent valuation (Price 1994), telephone plan pricing, and magazine subscription costs (Gourville 1998).

The principles that make PAD a successful marketing strategy can also help individuals achieve their personal savings goals: just "pennies a day" can add up to significant savings over time.²⁵ With this in mind, the Social Security Administration has begun to insert an information sheet into the mailings that contain the annual Social Security statements for young workers. The insert illustrates the benefits of the PAD strategy with a bar graph that shows the growth in savings associated with putting away \$25 and \$50 per week for 40 years, assuming a 5 percent annual rate

of return (SSA 2009). This graph helps young workers consider the aggregate effects of even relatively small weekly savings.

Another example of the effects that bracketing can have on individuals' financial decision making is *myopic loss aversion* (Benartzi and Thaler 1995). Myopic loss aversion refers to investors' tendency to be more risk averse when they evaluate their stock portfolios more frequently. This effect is the result of the particularly disadvantageous combination of narrow bracketing and loss aversion. Over the long run, taking risks in the stock market generally produces greater gains than less risky approaches, such as purchasing bonds (Benartzi and Thaler 1995; Mehra and Prescott 1985). When investors evaluate their portfolios too often (or, myopically), they observe the stock market fluctuations that are to be expected in the short run, but do not generally affect long-term returns. Research has suggested that investors will be more sensitive to small negative fluctuations than to small positive ones (that is, loss aversion), resulting in more risk aversion and potentially suboptimal investment decisions (Benartzi and Thaler 1995).

Framing effects. System 1 processing often leads to judgment errors, such as those brought about by the availability heuristic. System 1 impulses that System 2 fails to override can also produce self-control failures (Shiv and Fedorikhin 1999). Additionally, System 1 processing leaves decision makers susceptible to *framing effects* (Tversky and Kahneman 1981), whereby manipulating surface features of a decision problem can lead individuals to make different judgments about otherwise equivalent options. Framing effects highlight how “lightly” System 2 actually monitors System 1's outputs (Kahneman 2003), and they also underscore the fundamental role policymakers can have in affecting change in individuals. The default effect mentioned earlier is an example of a framing effect; simply designating a particular option as the default leads to its acceptance by a disproportionate share of decision makers. Whether a decision—organ donation, for example—is framed as an opt-in or an opt-out choice, analytical System 2 recognizes the options are the same (you can donate your organs or not); intuitive System 1 does not get beyond encountering the default option and sticking with it.

Framing effects challenge the notion that man is economically rational, in that they violate the principle of invariance,²⁶ a basic axiom of rationality (von Neumann and Morgenstern 1944). The principle of invariance asserts that “different representations of the

same choice problem should yield the same results” (Tversky and Kahneman 1986, S253). In other words, the way in which options are presented to the decision maker should have no bearing on his or her ultimate decision. Default effects demonstrate violations of invariance because, for example, individuals' preferences for organ donation are indeed affected by the presentation of options.

One classic example of the impact of framing on choice is the “Asian disease” problem (Tversky and Kahneman 1981), which also highlights the systematic difference in individuals' risk preferences for gains and losses described earlier. In the Asian disease problem, participants are asked to choose which of two risky programs should be adopted to treat an imminent outbreak of a deadly Asian disease. The options are either presented in terms of the number of people who will be saved as a result of the adopted treatment or in terms of the number of people who will die if the treatment plan is adopted. Results show that participants choose the riskier treatment option when the outcomes are presented in terms of losses (that is, the number of people who will die) and the less-risky option when the outcomes are presented in terms of gains (that is, the number of people who will be saved). As explained earlier, individuals' risk preferences, and subsequent judgments and decisions, tend to differ depending on whether they are considering gains or losses from a reference point. The Asian disease problem is an ideal example of how framing can shift individuals' assessments of a scenario, leading them to pursue disparate courses of action.

Using a paradigm analogous to the Asian disease problem, Olsen (1997) surveyed Chartered Financial Analysts and found that their responses depended on whether a particular investment decision was framed as either a gain or a loss. Specifically, the survey posed a scenario in which a client's \$60,000 investment was in jeopardy due to a downturn in the stock market. The analysts were then asked to choose between two risky strategies in which a certain amount of the client's investment would be saved (gain frame) or lost (loss frame). As in the Asian disease problem, these experienced investment managers chose the less-risky option when the options were presented in a gain frame and the riskier option when they were presented in a loss frame. Even though the client's final outcome would be identical in both scenarios, the analysts' choices were influenced by framing.

Epley, Mak, and Idson (2006) explored how framing can affect spending decisions. The authors examined

the likelihood that subjects would spend funds according to whether those funds were labeled a “bonus” or a “rebate.” Consistent with the argument that individuals perceive a “bonus” as a gain from the status quo and a “rebate” as a return to a previous level of wealth, participants were more likely to spend funds described as a bonus and save funds described as a rebate. The authors demonstrated that framing even affected individuals’ recollection of earlier behavior. Participants who were asked to recall their behavior after receiving a government-issued check under President Bush’s Economic Growth and Tax Relief Reconciliation Act of 2001 reported spending more of the money if the check was described as a “bonus” than those to whom it was described as a “rebate.” Because the tax relief was termed a “rebate” at the time, this unintentional framing may have resulted in Americans saving, rather than spending, much of the money that was meant to stimulate the economy. In fact, Shapiro and Slemrod (2003a, 2003b) found that prior to actually receiving their checks, respondents generally thought that their rebate would be unlikely to stimulate their spending behavior; Epley, Mak, and Idson’s (2006) experiment suggests that framing the checks as rebates may have led Americans not to spend these funds. This study highlights how JDM research can be used to inform policy; policymakers must be mindful that framing can affect individuals’ behavior and provide unintended impediments to well-meaning interventions (Epley and Gneezy 2007).

Choice architecture. As shown above, simply changing the wording of the options (“lives saved” versus “lives lost” or “bonuses” versus “rebates”) is just one example of how framing can have real implications for decision making. Policymakers play a crucial role in designing and engineering decision environments; as *choice architects*, they can nudge decision makers in one direction or another by tweaking certain aspects of the choice context. To complicate matters, every aspect of the choice environment—from which candidate’s name appears first on a voting ballot to the location of restrooms in an office building—has the potential to affect behavior. Thus, when contemplating the specifications of any choice environment, the choice architect confronts a challenging inevitability: there is no “neutral” design (Thaler and Sunstein 2008). One of the candidates’ names *must* appear first on a ballot, and a building’s restrooms *must* be located somewhere, and research on the importance of choice architecture suggests that such decisions are not inconsequential.

For example, Miller and Krosnick (1998) demonstrated that candidates for elected office in various counties in Ohio enjoyed an advantage over their opponents if their name was listed first on the ballot. In order to test for name-order effects, the authors created “order variables,” which took into account the order in which candidates’ names appeared on the ballots in different precincts in three of Ohio’s counties. The results were striking: Significant name-order effects were seen in just under half of the 118 races. Furthermore, approximately 90 percent of the races in which name-order effects were observed showed a clear primacy effect: When a candidate was listed first on the ballot, he or she received more votes than when he or she was listed last. Ideally, the order in which candidates are listed on a ballot would have no bearing on who is ultimately elected; this detail is unrelated to a candidate’s job qualifications.²⁷ Miller and Krosnick demonstrated, however, that this seemingly arbitrary aspect of the voting process had a significant, and somewhat troubling, effect on voter behavior. As such, the authors suggest that all states adopt the practice of rotating candidates’ names on ballots, as is required in Ohio, Idaho, and Montana. Miller and Krosnick’s study is a prime example of the effects that presumably insignificant details can have on behavior. As Thaler and Sunstein (2008, 3) note, when it comes to choice architecture, “everything matters.”

Indeed, Benartzi and Thaler (2007) discovered that even the number of lines on an investment sign-up form had an effect on investment choices. The researchers asked subscribers to the Morningstar.com website to indicate on a provided form how they would choose to distribute their retirement funds amongst eight potential options. On the form presented to one group of participants, four lines were visible, and a link was provided to expand the display to eight lines. For the second group of participants, all eight lines were visible. This ostensibly inconsequential difference in the format of the allocation form produced a four-fold difference in the percentage of participants choosing more than four funds: Only 10 percent of those presented with the form containing four visible lines chose more than four funds, while 40 percent of those with eight lines visible chose more than four funds. Similar to the name-order effect in voting described above, the number of lines listed on an investment form should have no bearing on the number of funds in which individuals ultimately invest; the best investment strategy is unrelated to the number of lines listed on a sign-up form. Nevertheless, although

the effort of expanding the option list from four to eight was negligible (that is, simply clicking on a link), the difference between the forms actually affected individuals' proposed investment strategies.

It is not difficult to think of examples in which the clever use of choice architecture by retailers can induce consumers to spend more. For example, displaying a product at the end of an aisle, using a yellow price sign, or placing an item in a separate bin will likely signal to a shopper that an item is on sale, even if it is not. Choice architects in the retail industry—as well as lobbyists, politicians, and anyone else—have access to countless tools to design decision environments with their own best interests in mind (Economist 2006). However, policymakers can also use choice architecture to usher in positive changes, such as increasing Americans' savings rates. For example, both the SMarT program described in Thaler and Benartzi (2004) and the automatic IRAs proposed by the RSP employ choice architecture to promote retirement savings. Choice architects are in a unique position to nudge individuals down a particular path, and although this task is often met with controversy (Economist 2006; Thaler and Sunstein 2003, 2008), responsible architects can encourage individuals to take positive steps toward accomplishing their goals.

Future Directions in the Study of Retirement Savings

When considering how and why individuals decide to save for retirement, there are a number of issues that policymakers must untangle. Some of these matters deal with the amount and type of information decision makers receive, and these concerns often can be met with interventions aimed at improving financial literacy or by presenting relevant information that is more user-friendly. Traditional economic theory suggests that if decision makers are armed with all of the appropriate information and tools, they should make optimal decisions. The research outlined in this article, however, suggests that informational issues may represent only a subset of the impediments individuals can face on their paths to future financial well-being. The concepts and examples presented herein demonstrate that people make an array of unsatisfactory choices and decisions, ranging from self-control failures to suboptimal asset allocation, that cannot be readily explained by economic models nor entirely remedied by making additional information available. Behavioral economists and JDM researchers have studied decision makers' imperfect judgments and have

presented coherent theories to explain many of them. Several novel interventions based on these theories are described below.

Incentivize Saving

Starting a diet is undoubtedly a difficult undertaking (as evidenced by the rising obesity rate in America), but growing waistlines can help motivate individuals to begin a weight-loss program. Although the results of dieting are delayed, the incentives of weight loss are ever-present. Unfortunately, saving for retirement lacks the same conspicuous benefits as weight loss. A photo of one's future 65-year-old self cannot be taped onto a credit card the way a picture of one's formerly thin self can be taped onto the refrigerator. For many people, the benefits of saving for retirement are so remote and so intangible that a little extra money in one's paycheck now is far more attractive than making oneself comfortable in the very distant future. Nevertheless, the consequences of repeated self-control failures regarding saving can be substantial; recall that SSA's "young worker" insert shows that placing just \$25 per week (roughly equivalent to a specialty coffee per day) in a retirement savings account with a 5 percent annual rate of return can result in savings of more than \$160,000 over 40 years (SSA 2009).

By showing how saving modest amounts now can accumulate substantial amounts over time, the graph in the SSA insert can urge young workers to think about saving in a way that they may not have done on their own. Still, it does not provide an immediate incentive to engage in behavior whose benefits are only realized in the distant future. Potential savers lack the incentive to save that dieters receive each time the number on the scale goes down or their dress size gets smaller.

Incentivizing saving in the present may help individuals adequately prepare for the future. One possible strategy could be for employers to offer their employees "points" for saving, much as they offer points or bonuses for making sales or acquiring new clients. Employers who match their employees' retirement contributions could take a portion of that match and instead put it toward tangible goods, such as big-screen televisions or washing machines.²⁸ Such a strategy would encourage employees to reach large long-term savings goals (retirement funds) by providing smaller goals in the short term (a new TV). Alternatively, employers could set up a lottery system, wherein employees who actively contribute a certain minimum percentage of their paycheck each month

would be entered into a lottery with a cash prize. Banks around the world have used lottery-linked deposit accounts to encourage customers to save, and have succeeded in increasing their number of customers (Guillén and Tschoegl 2002). In an employer-based version of a lottery, only employees contributing to their retirement accounts during a given period would be entered into the lottery. This plan capitalizes on individuals' desire to minimize regret (Zeelenberg 1999), as those who have not contributed to their retirement account have no chance of winning even though their coworkers do. To make regret even more salient, every employee's name could be entered into the lottery, but only employees contributing to their retirement accounts could actually win. In this arrangement, employees would know if they *would have* won had they contributed that month. This is similar to the common practice on game shows or slot machines in which the prizes associated with the options the players *did not* choose are revealed.²⁹

Reframe the Problem

Narrow framing, or bracketing, has been suggested as a tool to facilitate adherence to self-control goals that might otherwise be overwhelming. Read, Loewenstein, and Rabin (1999, 189) introduce the notion of "motivated bracketing" as a way for recovering alcoholics, for example, to reframe their goals in a way that emphasizes daily successes ("one day at a time") rather than month-long, year-long, or life-long undertakings. In a similar vein, the authors also suggest bracketing budgets more narrowly, so as to reduce one's ability to rationalize overspending in the present by planning to use the remainder of a week or month to "make up for it." A weekly food budget of \$70 is easier for a spendthrift to manipulate than a daily food budget of \$10. In this sense, narrow bracketing could lead to more advantageous saving behavior.

Shifting from a broad frame to a narrow frame may also help investors save by allowing them to recognize that saving large sums of money for retirement may not be as daunting as it seems. This notion may be particularly important for individuals who use online calculators to determine how much money they will need to save to replace a given percentage of preretirement earnings. When future retirees obtain projections of how much money they will need for retirement, the number typically is very large—many individuals are undoubtedly shocked at the hefty sum of money they will need for retirement. One might feel that such a huge amount of money is surely unattainable, leading

him or her to assume that any attempts to save would be futile. However, if one were to shift from a broad frame to a narrow one, in which small, incremental savings goals are emphasized, the task of saving for retirement may seem within reach, and therefore, more worthwhile. Indeed, Read, Loewenstein, and Rabin contend that narrow bracketing can make one's goals seem more manageable.

Change Reference Points

As mentioned earlier, employees who must initiate their own retirement savings are more vulnerable to the effects of loss-aversion than those with automatic payroll deductions because of their differing reference points. Those without automatic payroll deductions may alleviate some of the pain of diverting part of their discretionary income toward retirement saving by actively changing their reference points. For instance, these individuals can mentally subtract the amount that would otherwise be deducted automatically, and this adjusted amount can serve as the employee's new reference point. This mental accounting³⁰ "trick" would allow individuals to establish a reference point that already takes into account the amount earmarked for retirement savings. This method is admittedly more susceptible to lapses in self-control than automatic payroll deductions, but it may be at least partially effective in encouraging self-directed retirement saving.

Although the mental accounting trick described above exploits reference dependence to encourage saving, reference points can also be impediments to saving. Salaries are, in essence, reference points for yearly income; as such, salaries establish a level below which potential savers may be unwilling to fall. The pain associated with seeing a loss from this reference point may preclude retirement savings. This may be especially true for those who feel they have no extra money to save. Once again, however, changes in reference points may encourage saving. Imagine an employee who earns \$55,000 and finds it too difficult to save for retirement because of current financial needs. If asked whether the job offer would have been declined if the salary had instead been \$52,500, the employee would more than likely answer "no." Between a \$55,000 salary and a \$52,500 salary, the difference in weekly earnings is only \$50, which can accumulate to roughly \$325,000 of savings over 40 years, assuming a 5 percent rate of return (SSA 2009). Upon realizing that he or she could have survived with a lower starting salary (that is, reference point), an individual

may decide he or she can actually adapt to a smaller paycheck and save for retirement. Individuals would be unlikely to mentally shift their reference points on their own,³¹ but by adjusting expectations, policy-makers can potentially alter the way decision makers evaluate certain problems.

The interventions described above aim to encourage saving across the lifespan so that individuals will be more financially secure in retirement. Incentivizing saving in the short term, reframing the decision context, and shifting reference points are all ways that can help individuals save more and spend less. These approaches are but a few of the possible interventions that researchers and policymakers could offer to aid individuals in their pursuit of future financial well-being.

Conclusion

The purpose of this literature review is to familiarize readers with aspects of the savings decision not accounted for by traditional economic theory. Researchers in JDM and behavioral economics have explored individuals' seemingly irrational savings behavior and have developed coherent theories to explain some of these behaviors. A departure from the notion of man as economically rational can help policymakers to better understand why people make the decisions they do. As a result, policymakers can craft careful interventions aimed at helping individuals make more optimal decisions. Additionally, in the absence of corporate or governmental intervention, decision makers themselves can take steps to remedy their own suboptimal behavior (for example, through precommitment devices). Examples of interventions already in place (such as the SMarT plan) have been identified, and possible avenues for future interventions have been presented. The behavioral economics and JDM concepts summarized herein can serve as powerful tools to encourage savings behavior and lead Americans toward more comfortable retirements.

Notes

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¹ For more information regarding the origins and history of JDM research, see Goldstein and Hogarth (1997), Hogarth (1993), and Kahneman (1991). For expositions on the development and recent increase in popularity of behavioral

economics see Angner and Loewenstein (2007), Loewenstein and Camerer (2004), and Rabin (2002).

² According to the Bureau of Economic Analysis, personal savings as a percentage of disposable income was 4.8 percent in December 2009 (<http://www.bea.gov/newsreleases/national/pi/2010/txt/pi1209.txt>). It should be noted that although the personal savings rate has vacillated recently—perhaps as a result of increased debt repayment during the recent economic downturn (Mui 2010)—personal savings in the United States has declined over the past few decades and remains lower than in many modern nations (Jones 2010).

³ See Viceira (2007) for a recent review.

⁴ Of the 21 million participants in the sample, these individuals held above-average account balances.

⁵ For example, Mymoney.gov, a website sponsored by the U.S. Financial Literacy and Education Commission, provides information on saving and investing, retirement planning, and paying for education. The Jump\$Start Coalition for Personal Financial Literacy (<http://www.jumpstartcoalition.org>) targets young Americans and strives to promote curriculum-based financial education for students in grades K–12. The Social Security Administration (SSA) has recently announced a multidisciplinary research and development initiative called the Financial Literacy Research Consortium to educate the public on retirement savings and planning.

⁶ See Camerer and Weber (1992) for a review.

⁷ The reported overlap between self-assessed and objectively measured financial literacy was between 50 percent and 66 percent. Lusardi and Mitchell (2007, 12) interpret this as a “strong positive correlation” between the two measures.

⁸ One particular example is the “Ballpark E\$timate” online calculator, a feature of EBRI’s Choose to Save program (<http://www.choosetosave.org/ballpark/>).

⁹ Tversky and Kahneman (1973, 1974) first applied the concept of heuristics to the domain of judgment under uncertainty to describe the way individuals assess probabilities and estimate values. They demonstrated that decision makers attempt to reduce complex estimation problems into simpler terms through the use of various rules of thumb. More recently, decision-making researchers have expanded the notion of heuristics to domains other than probability and value estimation. As such, the concept of the heuristic has come to broadly describe judgments made quickly and with limited knowledge, time, or cognitive capacity (Gigerenzer and Todd 1999). There is much controversy in the JDM literature concerning exactly what constitutes a “heuristic” (for example, Oppenheimer 2003; Newell 2005), but a discussion of that debate is beyond the scope of this article.

¹⁰ Even experts, who, by definition, possess a great deal of knowledge in their respective areas of expertise, fall prey

to judgment errors when relying on heuristics (for example, Northcraft and Neale 1987; Tversky and Kahneman 1971). In fact, errors in experts' decision making are often attributed to overreliance on judgmental heuristics when solving problems in their areas of expertise (Shanteau and Stewart 1992; Slovic, Fischhoff, and Lichtenstein 1985).

¹¹ For more recent research exploring the impact of the availability heuristic on financial decisions, see Lee, O'Brien, and Sivaramakrishnan (2008), Kilger and Kudryavtsev (2010), and Semenov (2009).

¹² Recently, researchers have begun to explore the relationship between heuristic-based, System 1 processing and cognitive ability (see Stanovich and West (2008) for a thorough review of the findings). Results are mixed as to whether cognitive ability attenuates judgmental biases resulting from the use of heuristics and System 1 processing, but there is evidence suggesting that cognitive ability and "thinking biases" are often uncorrelated. Stanovich and West present a framework for identifying when cognitive ability is and is not likely to attenuate System 1-induced judgmental biases.

¹³ Of course, the benefit of life-cycle funds is contingent upon investors using them properly. However, a 2005 report by Vanguard showed that a significant percentage (71 percent) of Vanguard's life-cycle fund participants did not utilize the funds as intended. Rather than using the funds as "one-stop shopping," most life-cycle fund investors incorporated life-cycle funds into their overall portfolios as they would other funds. About half of Vanguard's life-cycle fund investors held a life-cycle fund in combination with at least one other investment option. Another third of the investors held multiple life-cycle funds, rather than a single one (Vanguard 2005). A more recent report showed a similar lack of understanding of target-date funds among 401(k) investors (Park 2009).

¹⁴ Research has mainly observed the status quo bias and default effects in inexperienced participants, that is, individuals who were not necessarily known to have had experience or expertise in the domain in question. It is possible that these effects would be less pronounced for experienced individuals or experts (Kempf and Ruenzi 2006). Only a few studies have addressed the attenuation of default effects in more knowledgeable individuals; results are mixed as to whether or not experience in a particular domain reduces the default effect (for example, Brown and Krishna 2004; Löfgren and others 2009) or does not (for example, Johnson, Bellman, and Lohse 2002).

¹⁵ Some research on the effects of an employer match on 401(k) participation has shown that the presence of a match does increase employee participation in retirement plans (for example, Investment Company Institute 2006), while other research seems to indicate that an employer match only modestly affects employees' savings behavior (Mitchell, Utkus, and Yang 2005). Furthermore, previous research has also shown that many employees fail to take full

advantage of matching opportunities (for example, Thaler and Sunstein 2008), thereby leaving matching contributions "on the table" (Choi, Laibson, and Madrian 2005, 14).

¹⁶ Of course, low participation in IRAs relative to 401(k) plans may have a number of causes. For an overview of such determinants, see Springstead and Wilson (2000).

¹⁷ Automatic IRAs may also succeed in part because of procrastination, in that individuals who intend to opt out of the plan may procrastinate and remain enrolled, all the while accumulating retirement funds.

¹⁸ Critics of certain aspects of automatic IRAs have argued that such IRAs should feature a forced "rollover" provision because many individuals with automatic IRAs would be low-wage earners, work in temporary jobs, or change jobs frequently (Munnell and Quinby 2009; PRC 2007). Without a rollover provision, the small amount of money accumulated in the IRA associated with each job would likely be cashed out (Munnell and Sundén 2006), preventing the significant accumulation of funds and defeating the purpose of the automatic IRA.

¹⁹ See Frederick, Loewenstein, and O'Donoghue (2002) for a thorough review of the literature.

²⁰ Christmas clubs are illiquid, zero-interest savings accounts into which individuals can deposit funds throughout the year so that they will have money with which to shop during the holiday season.

²¹ See Loewenstein and O'Donoghue (2005) for a detailed discussion of how emotions affect financial decisions in other ways, for example, their effects on risk perception and social preferences. See also Rick and Loewenstein (2008) for a description of how emotions can enter the decision process at various times.

²² Of course, immediate emotions need not result in negative behaviors, nor must expected emotions result in positive ones. For example, feeling full while grocery shopping may lead a dieter to purchase fewer unhealthy items for the upcoming week, and considering how one will feel if she misses a one-day sale may make a shopper spend money unnecessarily.

²³ See Wilson and Gilbert (2003) for a review of the literature.

²⁴ The authors estimate that people mispredict their future tastes by approximately one-third to one-half of the difference between future and current tastes.

²⁵ As an example, Wal-Mart recently changed its slogan from "Always Low Prices" to "Save Money. Live Better." Television commercials featuring this new slogan suggest that saving small amounts of money on everyday purchases can add up to significant amounts of money over the course of a year. In a similar vein, Bank of America's "Keep the Change" promotion rounds up debit card transactions to the nearest dollar and transfers the difference into customers' savings accounts. Customers enrolled in the "Keep the

Change” program can track the funds acquired through this system and see how the small amounts of change accumulate over time.

²⁶ The principle of invariance is described as extentionality in Arrow (1982).

²⁷ It is important to note that the authors did find some factors that moderated the name-order effect. Specifically, elections in counties whose residents were less educated showed greater effects of name order, as did those in which there were indicators (such as less media coverage of races) that voters knew less about the candidates. This particular set of moderators suggests that making more information available to voters may attenuate the name-order effect.

²⁸ Of course, taking a portion of the employer match to fund the purchase of tangible goods would necessarily reduce the amount the employer contributes to employees’ savings. However, the idea is that the increased incidence of employee saving that results from the point incentive more than compensates for the reduced employer match. That is, although the employer match would be lower with a points system than without it, the intervention would encourage more employees to contribute a larger percentage of their paychecks to retirement savings.

²⁹ See also Zeelenberg and Pieters (2004).

³⁰ For an overview of mental accounting, see Thaler (1999).

³¹ However, Heath, Larrick, and Wu (1999) demonstrate how individuals use goals as reference points.

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EXPANDING ACCESS TO HEALTH CARE FOR SOCIAL SECURITY DISABILITY INSURANCE BENEFICIARIES: EARLY FINDINGS FROM THE ACCELERATED BENEFITS DEMONSTRATION

by Robert R. Weathers II, Chris Silanskis, Michelle Stegman, John Jones, and Susan Kalasunas*

Most Social Security Disability Insurance (DI) beneficiaries must complete a 5-month waiting period before they become entitled to DI cash benefits and an additional 24-month waiting period before Medicare benefits begin. The Accelerated Benefits (AB) demonstration is a randomized experiment designed to test the effects of providing newly entitled DI beneficiaries who do not have health insurance with a generous health benefits package during the Medicare waiting period. This article presents early findings on the prevalence of health insurance coverage among newly entitled beneficiaries and the characteristics of those without health insurance. It also examines the effects of AB on health care utilization, the extent to which AB reduces unmet medical needs, and the costs of providing the AB health benefits package.

Introduction

Most Social Security Disability Insurance (DI) beneficiaries must complete a 5-month waiting period to qualify for cash benefits and an additional 24-month waiting period to qualify for Medicare. The 5-month waiting period begins with the first full calendar month after the onset of a disability.¹ Some beneficiaries within either of the waiting periods may lose employer-provided health insurance coverage because their disability prevents them from working. Those who lose employer-provided health insurance may find it difficult to afford health insurance available through provisions of the Consolidated Omnibus Budget Reconciliation Act, commonly referred to as COBRA coverage.² Other beneficiaries may not have had health insurance before disability onset and may find it difficult to obtain affordable health insurance coverage because of a preexisting condition. As a result, DI beneficiaries may not have access to the health care they need to address their disabling condition during the waiting period.

The popular press has used stories about a handful of beneficiaries to conclude that many beneficiaries

within the 24-month Medicare waiting period do not have health insurance and that many may go without the health care needed to address their disabling condition. For example, one recent article uses the case of one beneficiary to infer a much larger problem, stating that many DI beneficiaries “have spent their savings on the care necessary to reach a diagnosis and now cannot get private insurance” (Saker 2010). Disability advocacy groups have stated that removing the Medicare waiting period may have the long-term benefit of increasing employment among beneficiaries. For example, the Consortium for Citizens with Disabilities

Selected Abbreviations

AB	Accelerated Benefits
COBRA	Consolidated Omnibus Budget Reconciliation Act
DI	Disability Insurance
EBC	employment and benefits counseling
MCM	medical care management

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Selected Abbreviations—Continued

MPR	Mathematica Policy Research, Inc.
PGAP	Progressive Goal Attainment Program
SSA	Social Security Administration

has recommended eliminating the Medicare waiting period in order to help beneficiaries obtain the care required to stabilize their health condition and facilitate a transition to employment (CCD 2008). Yet policymakers lack the data to quantify the extent of the problem and the potential benefits of eliminating the Medicare waiting period.

Congress recognized the importance of health insurance coverage for individuals with disabilities in the “purpose and findings” section of the Ticket to Work and Work Incentives Improvement Act of 1999. Although the legislation did not alter the Medicare waiting period, it did authorize the Social Security Administration (SSA) to conduct a demonstration project designed to produce credible data on the costs and benefits of altering the 24-month Medicare waiting period. In 2005, SSA awarded a contract to MDRC, a nonprofit social policy research organization, to conduct the demonstration project. The project is called the Accelerated Benefits (AB) demonstration because it provides beneficiaries with a health benefits package before the completion of the Medicare waiting period.

This article describes the AB demonstration and the early findings from the project. The first section describes the core AB plan and the additional services available to some project participants. The second section describes the process used to identify, recruit, and enroll beneficiaries for the project, and presents findings from the enrollment process. The third section describes findings from the 6-month follow-up survey on AB service use and unmet medical needs. The fourth section presents data on AB health benefit expenditures and the characteristics of beneficiaries who reached the \$100,000 health benefit limit. A discussion of the findings to date and future research plans concludes the article.

Project Design

The AB demonstration project was designed to determine whether providing a health benefits package and additional services during the 24-month Medicare waiting period would improve the health status of DI beneficiaries, increase the chances that they return to work, and reduce their reliance on DI cash benefits.

We designed the project in collaboration with MDRC and their subcontractors.³ Key design features are described below.

Study Population and Study Sample

The study population for the AB demonstration project was DI beneficiaries who (1) were aged 18 to 54, (2) did not have health insurance coverage, (3) did not have a representative payee, and (4) were within the first 6 months of DI entitlement. Several studies indicated that this population group was likely to benefit from the AB plan and services. We selected a younger group because research has shown that younger recipients are more likely to return to work.⁴ We selected those without health insurance coverage because research has shown that they are more likely to have unmet medical needs, and thus could benefit from the AB plan.⁵ Excluding DI beneficiaries with health insurance also excluded beneficiaries who concurrently receive Supplemental Security Income (SSI) payments, because most SSI recipients receive Medicaid coverage. We selected those who did not have a representative payee because we wanted to obtain informed consent from the DI beneficiary. Finally, we selected those within the first 6 months of DI entitlement because we wanted to provide the AB package for a substantive period before the 24-month waiting period ended and Medicare began. Based on our assessment of prior research and on discussion with MDRC and MDRC’s technical advisory group, we concluded that if the AB project does not have a substantive impact on our study population, then the AB program is unlikely to have a substantive impact for the broader population of DI beneficiaries.⁶

Our subcontractor, Mathematica Policy Research Inc. (MPR), selected a sample from the study population to test the impact of providing access to health benefits, either alone or in conjunction with additional services, to DI beneficiaries. MPR randomly assigned sample members into three groups: AB, AB Plus, and a control group. Participants in the AB and AB Plus groups had access to a health benefits package described below. In addition to health benefits, AB Plus members also received services designed to help them manage their health care, prepare for a return to work, and understand how employment might affect their benefits. We use the term “treatment group” to refer to the combined AB and AB Plus groups. The control group members did not receive access to health benefits, but they were not prohibited from obtaining health insurance through other means.

Health Benefits Package

The AB health plan covered a range of services designed to meet both general and specific health care needs of DI beneficiaries. The plan included basic hospital, medical, and drug benefits along with some nontraditional benefits including use of skilled nursing facilities, home health care, hospice care, prosthetics, dental care, nutritional counseling, and out-of-network services under certain circumstances.

No premiums were charged to individuals enrolled in the AB health plan. Participants were responsible for a \$12 copayment for most services; exceptions were ambulatory and emergency room services (\$35) and inpatient care (\$200). Although the plan covered 100 percent of most services, participants were subject to a maximum health care benefit of \$100,000. Limits were also placed on inpatient treatment for mental disorders, chemical abuse treatment, skilled nursing facility use, rehabilitation facility care, and home health care services. Certain procedures, services, and supplies required precertification or a utilization review to ensure that they were medically necessary.⁷

In addition to standard medical services, the AB health plan offered coverage for vision, hearing, and dental services. For vision care, the plan covered up to \$200 for refraction, lenses, frames, and contact lenses. Hearing test and hearing aid costs were fully covered up to a \$1,000 maximum benefit. The AB dental plan covered 100 percent of preventive/diagnostic (routine) services, 75 percent of basic services, and 50 percent of major services. Dental coverage was limited to a maximum benefit of \$1,000.

The plan covered most prescription drugs after copayments of \$5 for generic drugs, \$15 for preferred brand name drugs, and \$30 for nonpreferred brand name drugs.

AB Plus Services

AB Plus members received additional services that were not available to the AB and control group members. The first of these services was medical care management (MCM) provided by CareGuide, a health care management company. Each participant received a primary care manager, either a coach or a nurse, as determined by a preliminary assessment.⁸ Coaches provided beneficiaries with information on specific disorders, behavioral coaching, and assistance with obtaining health care. Nurses assessed clinical needs and assisted with navigating the health care system. These primary care managers monitored health care

needs and adherence to treatment protocols, and helped coordinate health care for the participant.

Once participants achieved sufficient medical stabilization, they could begin the Progressive Goal Attainment Program (PGAP). PGAP is designed “to reduce psychosocial barriers to rehabilitation progress, promote re-integration into life-role activities, increase quality of life, and facilitate return-to-work” (University Centre 2010). MDRC recommended PGAP based on evidence that suggested it could be effective in improving functioning and could increase the likelihood of a return to work for individuals with a disability (Sullivan and others 2005). Because SSA disability determinations require DI claimants to be incapable of performing substantial gainful work, beneficiaries may have the false perception that they are unable to engage in activities that may lead to an eventual return to work. We thought PGAP could help beneficiaries overcome this perception. AB Plus participants were sent a PGAP video and workbook, and CareGuide coaches worked with AB Plus participants by telephone to help them complete PGAP.

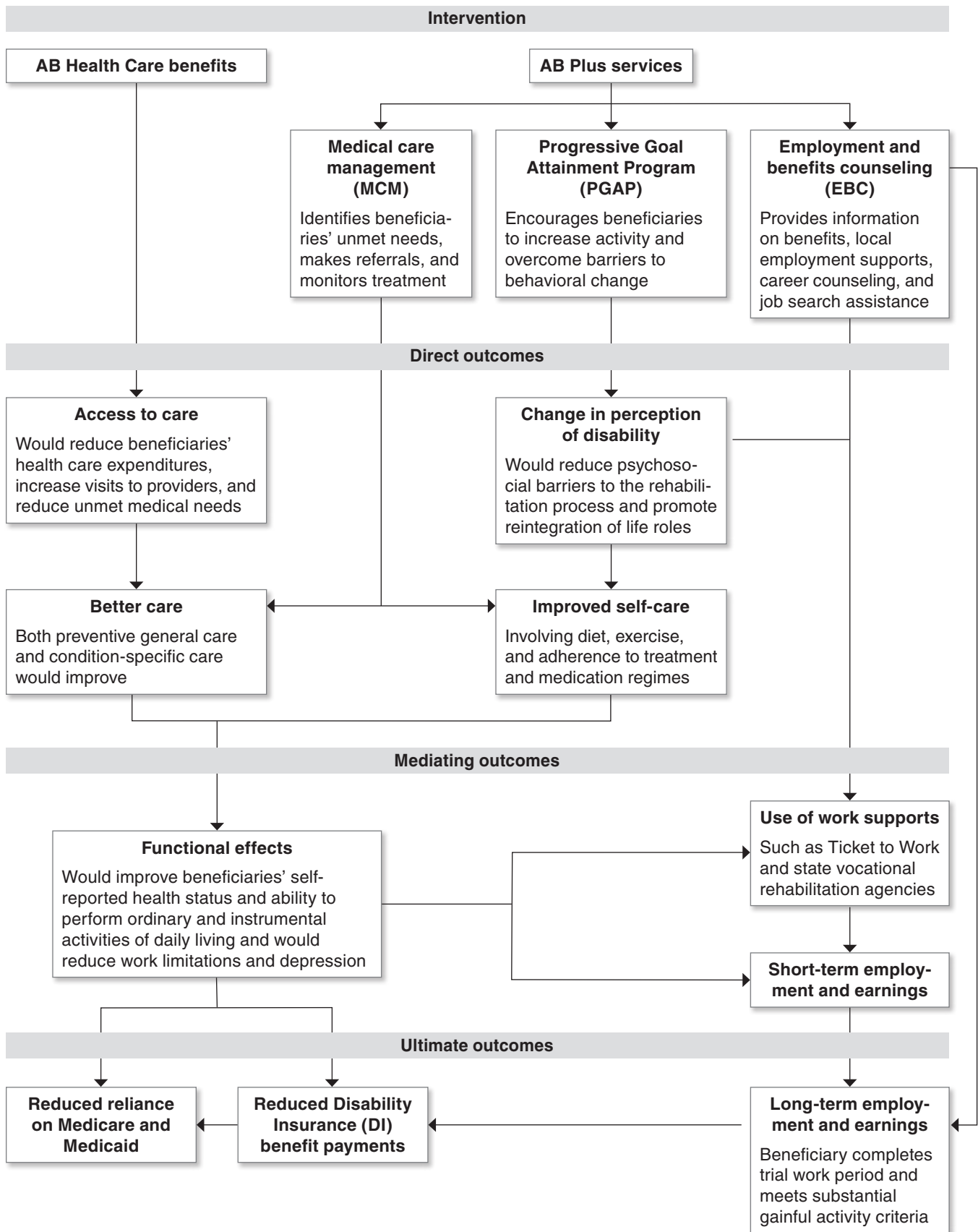
AB Plus staff referred participants who showed interest in learning more about employment, and how it may affect their benefits, to employment and benefits counseling (EBC). EBC included discussion about the participant’s work history, credentials, career goals, and employment expectations. Counselors also notified participants of local support services and helped prepare them for a return to work. Participants were given information on how employment could affect their benefits, reporting requirements, and work incentives. Transcen, Inc. provided EBC service by telephone.

Hypotheses

We hypothesize that the AB package will initially increase access to health care and reduce unmet health care needs among our study population (Chart 1). We also expect to see an increase in preventive care and quality of care overall. These direct outcomes should lead to improved functioning and health status, which may result in a return to work for some participants. The expected long-term outcomes include a reduction in DI benefits resulting from an increase in long-term employment and a reduction in future expenditures of public health insurance programs, such as Medicare and Medicaid, resulting from increased preventive care.

The AB Plus services provide additional supports to participants through three components as shown

Chart 1.
Anticipated flow of outcomes in Accelerated Benefits (AB) and AB Plus study groups



SOURCE: Social Security Administration Office of Program Development and Research.

in Chart 1. MCM service helps participants adhere to the proper course of treatment. This can reduce the incidence of secondary health conditions that arise from deviations from a medical treatment regime, lead to additional improvements in overall health and functioning, increase chances of employment, and reduce reliance on public benefits. We hypothesize that PGAP will help beneficiaries change their attitudes toward their disabling condition and increase their motivation. Participants with higher motivation and a positive attitude may be more likely to seek work support programs and employment. EBC services will provide additional employment-related services, which should lead to higher reemployment and reduced reliance on public benefits.

AB Demonstration Not Designed to Estimate Induced Entry

The AB demonstration project will not produce an estimate of induced entry into the DI program. Induced entry may occur when DI changes involve new benefits or services that induce some individuals with disabilities to enter the program. Induced entry effects are difficult to estimate and, for DI, small increases in induced entry can translate into substantial program costs. Because the costs would increase significantly if we designed the demonstration to estimate induced entry effects and the complexity of such a design would have introduced substantial risks, we decided against developing a project with that capability.⁹

Recruitment Process

The AB demonstration recruitment goal was to enroll 2,000 uninsured DI beneficiaries. Our original intent was to assign 20 percent to the AB group, 40 percent to the AB Plus group, and 40 percent to the control group. As discussed later, however, health care costs necessitated a revised allocation. Ultimately, AB enrolled 2,005 participants: 616 (31 percent) in the AB Plus group, 401 (20 percent) in the AB group, and 988 (49 percent) in the control group. One AB Plus participant dropped out of the study, bringing the final total to 615.

We used SSA administrative records to identify newly entitled beneficiaries aged 18–54 who had to wait at least 18 months for Medicare entitlement and who were their own payees. Restricting the pool to beneficiaries who had at least 18 months left in the waiting period excluded a large number of beneficiaries who received an award notification letter after this

period. Thus, we excluded beneficiaries who received benefits based on an appeal of their initial disability determination. We sent a monthly administrative data file to MPR, the subcontractor responsible for recruiting. Each file contained a new set of beneficiaries meeting our selection criteria. MPR sent a letter with information about the demonstration to a sample of beneficiaries identified in the file. A few days after sending the letter, MPR phoned those who agreed to participate to determine whether they had health insurance and were cognitively able to provide informed consent. Respondents who reported that they did not have health insurance at the time of the interview, and who could provide informed consent, completed a baseline survey that elicited information about their overall health status, use of medical services, employment history, attitudes toward work, household and demographic characteristics, and income; and whether they sought employment support services.¹⁰ Immediately upon finishing the survey, the MPR interviewer used a computerized random assignment algorithm to identify whether the participant was assigned to the AB Plus group, the AB group, or the control group. The MPR interviewer informed participants randomized into the AB or AB Plus groups of their assignment during their phone interview. MPR informed participants assigned to the control group by mail.

We used a two-phase recruitment strategy. The first phase was a demonstration pilot to guide the implementation of the larger second phase. The enrollment rates for both phases were exceptionally high, with 100 percent of the eligible Phase 1 beneficiaries and 99 percent of the eligible Phase 2 beneficiaries agreeing to participate.

Phase 1 began in October 2007 in four metropolitan areas—Houston, Minneapolis, New York City, and Phoenix. We sent MPR two administrative data files, one drawn at the end of September 2007 and one drawn at the end of October 2007. MPR sent letters to 1,503 beneficiaries in the 4 sites and 358 of the beneficiaries completed the health insurance questionnaire. Of those who completed the questionnaire, 70 candidates (19.6 percent) did not have health insurance. MPR limited Phase 1 enrollment to 66 beneficiaries and did not contact 4 of the candidates. All of the remaining 66 beneficiaries agreed to participate and completed the baseline survey. Phase 1 enrollment ended in November 2007.

The first phase provided lessons to help recruitment in the second phase of the demonstration. Given the larger enrollment target of 1,934 participants in

Chart 2.
Accelerated Benefits study Phase 2 sites



SOURCE: Social Security Administration Office of Program Development and Research.

Phase 2, site selection required particular consideration of managing project costs.¹¹ We determined that major metropolitan areas with high concentrations of DI beneficiaries would be the best locations and selected the largest 53 metropolitan areas.¹² Chart 2 is a map showing the Phase 2 sites. We discontinued enrollment in (and dropped from the demonstration) Buffalo, because high rates of insured beneficiaries resulted in low enrollment; and Boston, because a change in state law mandated universal health insurance.

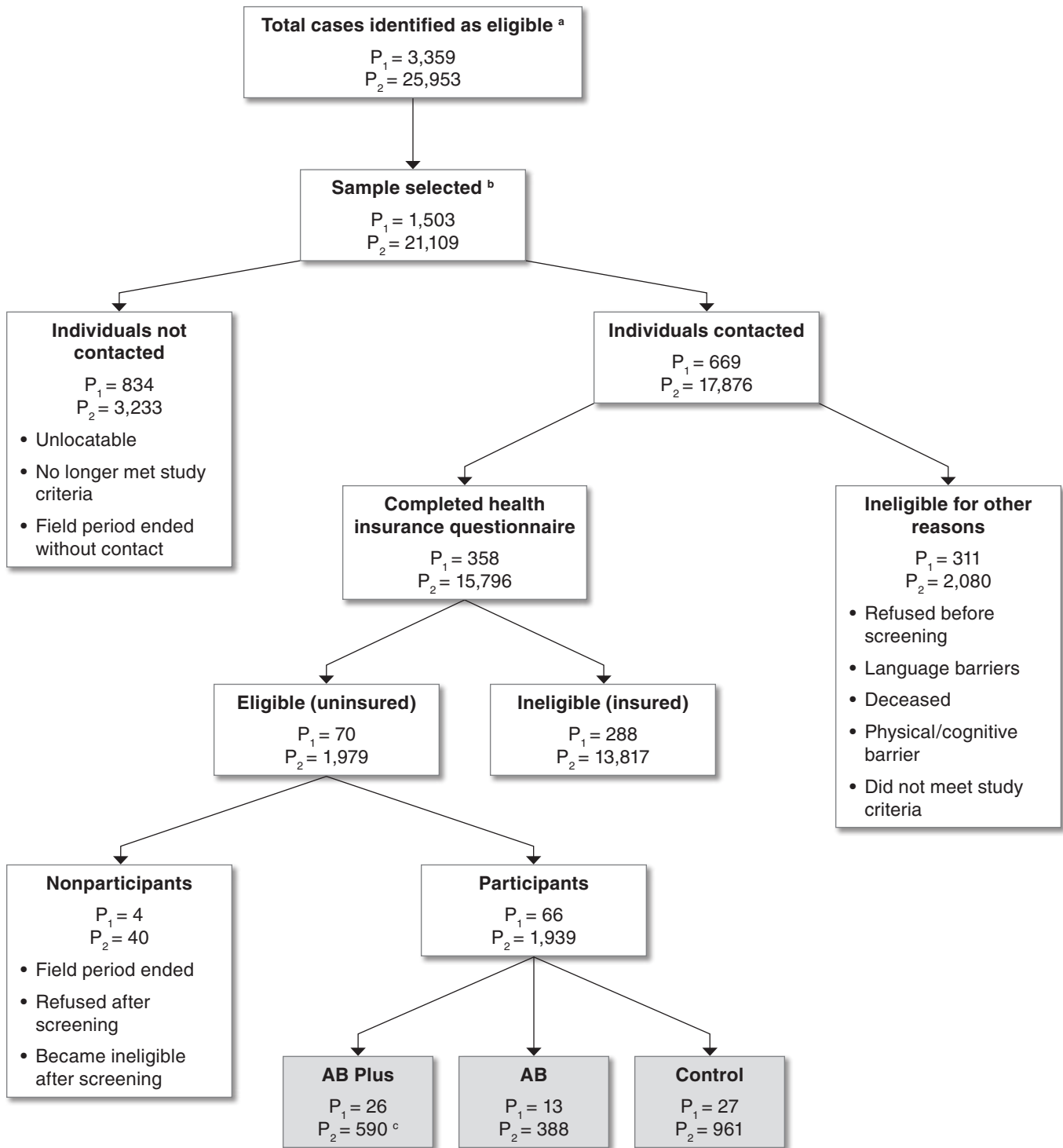
Phase 2 recruitment began in March 2008. We used the same recruitment procedures as in Phase 1, with only minor changes to the baseline survey. We sent monthly administrative record files to MPR beginning in February 2008 and continuing through December 2009. MPR sampled 21,109 of the 25,953 beneficiaries identified by SSA administrative files as meeting the demonstration's eligibility criteria. MPR contacted 17,876 beneficiaries by telephone and of those, 15,796 completed the health insurance question. The screening determined that 1,979 beneficiaries did not have health insurance and were eligible to participate, and

MPR randomized 1,939 beneficiaries into the three study groups.

In November 2008, we stopped enrolling beneficiaries in the AB Plus study group. The original enrollment target for AB Plus was 800 participants, but we capped enrollment at 616 to contain costs. Health benefit expenditures for the Phase 1 sample were 50 percent higher than expected, and our estimates indicated that the budget could not support enrollment of 800 AB Plus participants. We determined that we would need to observe larger program benefits to justify the higher health benefit costs, and the final AB Plus sample size was statistically sufficient to identify important effects. To partially compensate for the loss in statistical precision associated with the smaller sample size, we expanded the control group from 800 to 1,000.

When Phase 2 enrollment ended in January 2009, 1,939 beneficiaries were enrolled, with 590 participants in the AB Plus group, 388 in the AB group, and 961 in the control group. One member of the AB Plus group dropped out of the study, lowering the Phase 2 enrollment to 589 participants. Chart 3 summarizes the case flow for both phases of the project.

Chart 3.
Accelerated Benefits (AB) study population selection



SOURCE: Mathematica Policy Research, Inc. (MPR) recruitment data, October 2007–January 2009.

NOTE: P₁ = Phase 1; P₂ = Phase 2.

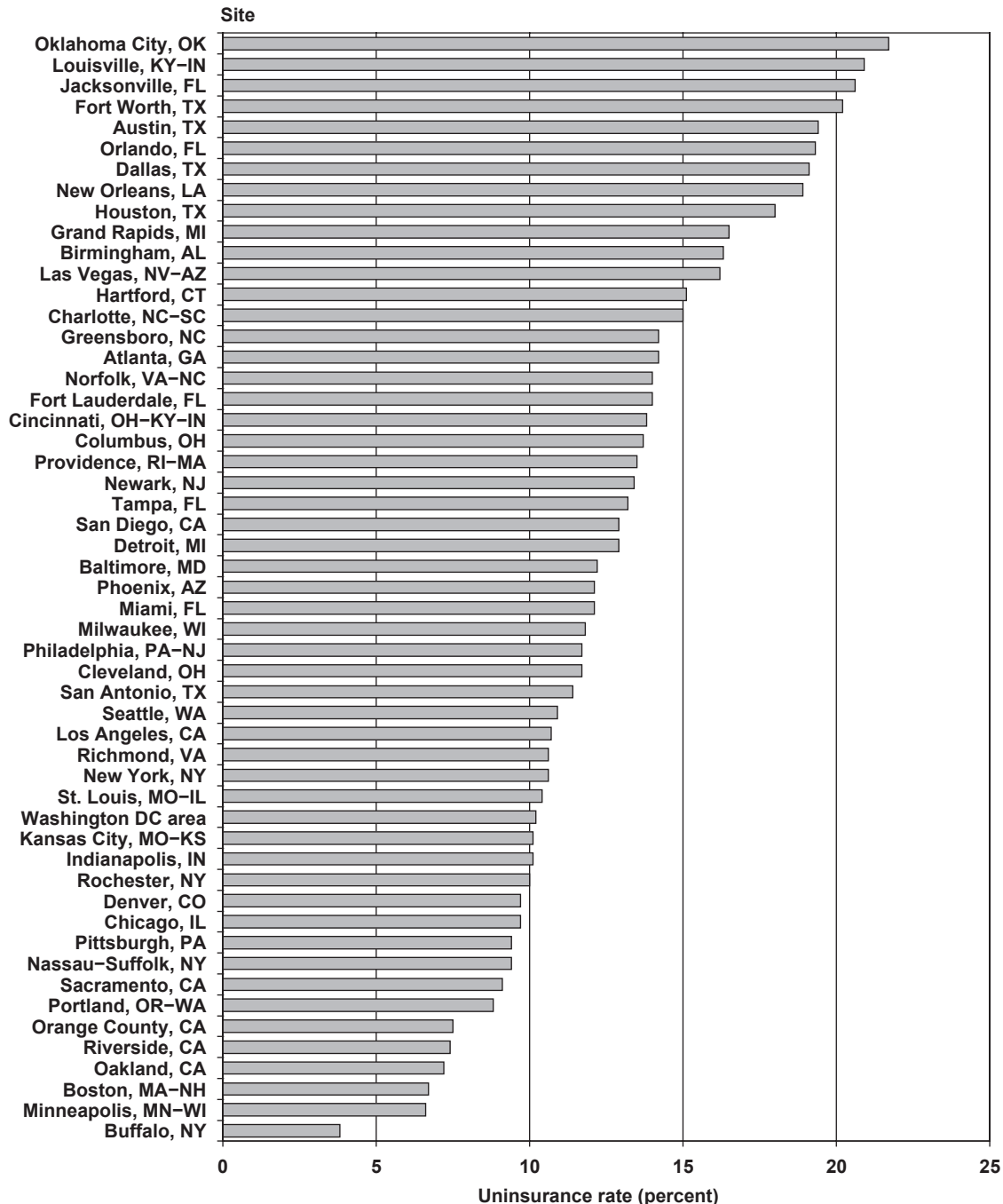
- a. Social Security Administration (SSA) identified beneficiaries meeting initial eligibility criteria based on administrative data and provided a list of these beneficiaries to MPR.
- b. MPR selected a random sample of the beneficiaries identified by SSA. MPR sent these individuals a letter describing the AB demonstration and inviting them to participate.
- c. One AB Plus participant dropped out of the study after randomization.

Prevalence and Type of Health Insurance Coverage

Given that 16,154 screened beneficiaries (358 in Phase 1 plus 15,796 in Phase 2) responded to all of the health insurance questions, and 2,049 (70 in Phase 1 plus 1,979 in Phase 2) were without insurance, the overall rate of those without health insurance was

12.7 percent. This rate varied substantially across the 53 sites, as shown in Chart 4. The highest rates of beneficiaries without health insurance were in Oklahoma City, Louisville, two sites in Florida, New Orleans, and four sites in Texas. The lowest rates were in Buffalo, Minneapolis, Boston, and several sites in California.

Chart 4. Uninsurance rate among Disability Insurance (DI) beneficiaries selected and contacted for Accelerated Benefits (AB) study, by site



SOURCE: Mathematica Policy Research, Inc., AB demonstration project baseline survey, October 2007–January 2009.

The baseline survey that identified whether a beneficiary had health insurance also provided data on the source of coverage for the insured. Among the 14,105 beneficiaries who reported health insurance coverage, 27.8 percent had insurance through an employer, 29.5 percent were covered by a spouse's plan, and 15.6 percent were covered through COBRA (Table 1). Nearly 32 percent of insured beneficiaries had coverage from public sources, with almost 18 percent insured through Medicaid or Medicare.¹³ About 8 percent had coverage through both a private and public plan.

Characteristics of Those with Health Insurance Compared with Those without Coverage

Table 2 compares the age, sex, and impairment characteristics of three groups of beneficiaries identified for the study—the entire set of beneficiaries who were sent a letter about the AB project, the subset who reported having health insurance coverage, and the subset who agreed to participate in the study. Participants are similar to the group with health insurance in terms of age at entitlement and distribution by sex: Nearly 30 percent of each group are younger than 45, about 70 percent are aged 45–55, and a little over 49 percent are women. These groups are slightly older and have a larger percentage of female beneficiaries than the entire selected sample, where 69 percent were in the older age category and about 48 percent were

women. There are differences in the distributions of impairment types between the groups. Participants are more likely than those reporting health insurance coverage to have mental disorders (22.0 percent versus 15.0 percent), diseases of the circulatory system (11.7 percent versus 8.7 percent), diseases of the musculoskeletal system and connective tissue (19.4 percent versus 14.0 percent), and diseases of the nervous system and sensory disorders (16.8 percent versus 14.8 percent). Participants are less likely to have neoplasms (8.2 percent) than beneficiaries who report that they have health insurance (23.8 percent).¹⁴

Characteristics of Project Participants from Baseline Survey

The baseline survey that MPR administered prior to randomization provided a more detailed description of beneficiaries who agreed to participate in the study. Table 3 presents the participants' demographic characteristics and includes information on their income, education, and homeownership status. Table 4 presents self-reported health, functional, and physical limitations in addition to primary diagnosis categories. Table 5 presents the health insurance coverage that participants reported having prior to randomization. Table 6 presents the percentage of reported unmet needs prior to randomization, with medical and prescription drug needs shown separately. All tables include p-values to help identify differences in characteristics across groups

Table 1.
Percentage of Disability Insurance (DI) beneficiaries with health insurance coverage, by type

Type of insurance	Phase 1	Phase 2	Total
Any public	26.3	31.7	31.6
Medicare/Medicaid	15.2	17.6	17.6
Military health care benefits	5.2	7.9	7.8
Indian Health Service	0.0	0.3	0.3
Workers' compensation	5.2	4.0	4.0
Other state plan	4.8	4.6	4.6
Any private	74.7	75.8	75.8
Beneficiary's current/former employer	26.3	27.8	27.8
Spouse's current/former employer	27.7	29.5	29.5
Self- or family-paid	5.2	5.0	5.0
COBRA	20.4	15.5	15.6
Other	0.0	1.8	1.8
Sample size	288	13,817	14,105

SOURCE: Mathematica Policy Research, Inc., Accelerated Benefits (AB) demonstration project baseline survey, October 2007–January 2009.

NOTES: COBRA = Consolidated Omnibus Budget Reconciliation Act.

The sums of the values by coverage type may exceed the "any public" and "any private" subtotals because beneficiaries may have more than one type of coverage. Likewise, the sum of the "any public" and "any private" subtotals may exceed 100 because beneficiaries may have both.

Table 2.
Percentage distributions of Disability Insurance (DI) beneficiaries by age group, sex, and type of impairment: Selected sample, beneficiaries with health insurance, and study participants

Characteristic	Selected sample	Insured	Participants
Age			
44 or younger	31.0	29.5	29.9
45 or older	69.0	70.5	70.1
Sex			
Men	52.2	50.9	50.2
Women	47.8	49.1	49.8
Impairments			
Mental disorders ^a	15.8	15.0	22.0
Neoplasms	24.3	23.8	8.2
Diseases of the—			
Circulatory system	9.1	8.7	11.7
Musculoskeletal system and connective tissue	13.4	14.0	19.4
Nervous system and sense organs	14.3	14.8	16.8
Other ^b	23.2	23.6	22.1
Sample size	22,612	14,105	2,005

SOURCE: Authors' calculations based on Social Security administrative data.

a. Excludes mental retardation, which is categorized at "Other."

b. Includes congenital anomalies; endocrine, nutritional, and metabolic diseases; injuries; mental retardation; diseases of the blood and blood-forming organs, digestive system, genitourinary system, respiratory system, and skin and subcutaneous tissue; human immunodeficiency virus/acquired immune deficiency syndrome (HIV/AIDS); and other diagnoses.

that arose by chance and that might be correlated with the AB outcomes specified in Chart 1. MDRC provided evidence that they implemented the assignment process properly and that any differences are due to chance and not to deviations from random assignment.

Most of our study sample had an annual household income below \$30,000 (Table 3). Approximately 60 percent of the participants reported less than \$30,000 in income; 16.6 percent reported having less than \$10,000. Only 14.6 percent reported household income greater than \$50,000. The large share of beneficiaries with annual household income of less than \$30,000 indicates that many beneficiaries who enter the DI program without health insurance coverage may benefit from the recently passed health care reform, the Affordable Care Act. The law makes health insurance coverage more affordable by providing subsidies for families with income below 400 percent of the federal poverty line to purchase insurance through new health insurance exchanges.¹⁵ Many of the beneficiaries we contacted who did not have health insurance coverage were likely to meet the eligibility standards under the new law.

The data also provide a picture of the demographic characteristics of participants. The majority were

between ages 45 and 55. The sample was nearly equally split between men and women. The majority of participants were white (58.3 percent), and 22.0 percent were black. A large portion of the demonstration's participants (45.9 percent) lived in the South, and 42.1 percent owned their own home. The majority (51.6 percent) of participants reported having a high school diploma, but nearly 20 percent had a higher education degree. There are no substantive differences in demographic or economic characteristics between the AB Plus group, the AB group, and the control group.

Not surprisingly, most beneficiaries reported substantial health impairments and functional limitations (Table 4). High percentages of participants reported having mental disorders (22.0 percent) or diseases of the musculoskeletal connective tissue and nervous system (19.4 percent). Table 4 also shows a difference between the three groups for the primary diagnosis of a neoplasm, which was reported by 10.6 percent of the AB Plus group, 8.2 percent of the AB group, and 6.7 percent of the control group. We are somewhat concerned about this difference because of the high incidence of death among beneficiaries with neoplasms during the 24-month waiting period, and accounting for this difference when analyzing

Table 3.
Selected demographic and socioeconomic characteristics of Accelerated Benefits (AB) project participants at baseline, by study group

Characteristic	AB Plus group	AB group	Control group	Total	P-value	Percentage missing ^a
Annual household income (%)						
Total	100.0	100.0	100.0	100.0	0.884	6.2
Less than \$10,000	17.2	17.9	15.8	16.6	...	...
\$10,000 to \$19,999	21.0	19.2	21.8	21.0	...	...
\$20,000 to \$29,999	21.8	21.3	23.5	22.6	...	...
\$30,000 to \$39,999	15.3	17.1	14.6	15.3	...	...
\$40,000 to \$49,999	9.0	9.7	10.4	9.8	...	...
\$50,000 or more	15.8	14.7	13.9	14.6	...	...
Marital status (%)						
Total	100.0	100.0	100.0	100.0	0.652	0.2
Married, living with spouse	43.4	41.3	39.6	41.1	...	...
Unmarried, living with partner	4.6	5.3	4.4	4.6	...	...
Married, not living with spouse	6.5	5.3	7.0	6.5	...	...
Unmarried, not living with partner	45.5	48.3	49.0	47.8	...	...
Families with any dependent children ^b (%)	24.7	24.6	24.4	24.5	0.988	0.5
Educational attainment (%)						
Total	100.0	100.0	100.0	100.0	0.399	0.1
General Educational Development (GED)	7.3	7.0	6.7	6.9	...	...
High school diploma	53.7	51.1	50.5	51.6	...	...
Technical certificate/associate's degree/ 2-year college program	9.6	13.0	9.2	10.1	...	...
Four (or more) years of college	8.1	8.2	9.8	9.0	...	...
None of the above	21.3	20.7	23.8	22.4	...	...
Age group (%)						
Total	100.0	100.0	100.0	100.0	0.103	0.0
18–34	6.0	9.2	9.7	8.5	...	...
35–44	21.8	22.7	20.6	21.4	...	...
45–55	72.2	68.1	69.6	70.1	...	...
Average age (years)	47.3	46.3	46.6	46.8*	0.066	0.0

(Continued)

mortality outcomes may be important. Over 94 percent of the randomized participants possess some form of disability that hinders their daily activities. Large shares of participants reported having difficulty standing for long periods (83.8 percent), climbing a flight of stairs (78.3 percent), or lifting or carrying a 10-pound package (62.7 percent). Participants also reported having difficulty preparing meals (36.6 percent), using public transportation (36.4 percent), taking medication (34.4 percent), and riding as a passenger in a car (21.1 percent). Over 80 percent reported some form of personal or emotional problems that hindered their daily activities in the 4 weeks preceding randomization. When the participants were asked the severity of their conditions, 34.9 percent reported they had “a lot” and 25.0 percent said they had “some” personal or emotional problems affecting their daily activities. A

substantial share of participants (14.2 percent) reported they could not do daily activities.

Table 5 shows the health insurance history of participants. Less than 4 percent reported that they had never had health insurance prior to enrollment. Of the participants who reported having had health insurance, 85.3 percent reported having private insurance. Eight percent of participants who had health insurance coverage reported that they had public coverage either through Medicare or Medicaid.¹⁶ Over 62 percent of the participants reported having health insurance within the last year, with 36.1 percent reporting they had health insurance in the 6 months leading up to the baseline survey.

A majority of participants reported unmet health care needs prior to randomization into the project.

Table 3.
Selected demographic and socioeconomic characteristics of Accelerated Benefits (AB) project participants at baseline, by study group—Continued

Characteristic	AB Plus group	AB group	Control group	Total	P-value	Percentage missing ^a
Sex (%)						
Total	100.0	100.0	100.0	100.0	0.272	0.0
Men	52.8	48.1	49.5	50.2	...	...
Women	47.2	51.9	50.5	49.8	...	...
Race/ethnicity (%)						
Total	100.0	100.0	100.0	100.0	0.585	0.7
White	60.9	58.1	56.8	58.3	...	...
Black	20.2	23.3	22.5	22.0	...	...
Hispanic	14.4	13.0	14.7	14.3	...	...
Other	4.4	5.5	6.0	5.4	...	...
Census region (%)						
Total	100.0	100.0	100.0	100.0	0.467	0.0
South	46.8	42.9	46.6	45.9	...	...
Midwest	17.7	21.7	19.0	19.2	...	...
West/Pacific	18.5	17.0	19.1	18.5	...	...
Northeast	16.9	18.5	15.3	16.4	...	...
Homeowner status (%)	44.8	44.1	39.6	42.1	0.142	0.5
Sample size	615	401	988	2,004		

SOURCES: MDRC calculations based on Social Security administrative data and Mathematica Policy Research, Inc., Accelerated Benefits (AB) demonstration project baseline survey, October 2007–January 2009.

NOTES: ... = not applicable.

A chi-square test for categorical variables and a t-test for continuous variables were run to determine whether there was a difference in the distribution of the characteristics across study groups. Statistical significance is indicated as * = 10 percent level. For categorical characteristics, the p-value and percentage missing apply to category totals only.

Additional tests were run to determine whether there was a difference in the distribution of the characteristics between specific pairs of study groups.

The following tests were statistically significant:

Test	P-value
<i>AB Plus versus AB</i>	
Average age, continuous	0.024
<i>AB Plus versus control</i>	
Average age, continuous	0.069
Average age, categorical	0.033
Current living arrangement	0.067

Totals do not necessarily equal the sum of rounded components.

- Missing values are due to survey responses of "don't know" or refusals to answer the question. Respondents with missing values were excluded from calculations of percentage distributions, means, and tests of statistical significance of differences across study groups.
- This measure includes children for whom the participant is a primary provider or caregiver.

Table 6 shows that 70.2 percent of participants reported some form of unmet medical needs and 69.9 percent reported some type of unmet prescription need. It also shows that 57.7 percent reported having postponed getting medical care and 47.0 percent reported they did not get medical care they needed. When the category was combined, 64.7 percent reported they either did

not get or postponed medical care they needed. Of the participants reporting unmet prescription needs, 53.9 percent reported that they used prescriptions less than prescribed, 53.7 percent reported they did not fill prescriptions when first prescribed, 51.5 percent reported they did not refill their prescriptions, and 47.8 percent did not fill entire prescriptions. There are

Table 4.
Selected health characteristics of Accelerated Benefits (AB) project participants at baseline, by study group

Characteristic	AB Plus group	AB group	Control group	Total	P-value	Percentage missing ^a
Health and functional limitations (%)						
Primary diagnosis						
Total	100.0	100.0	100.0	100.0	0.349	0.0
Mental disorders ^b	20.2	22.7	22.9	22.0	...	...
Neoplasms	10.6	8.2	6.7	8.2	...	...
Diseases of the—						
Circulatory system	11.9	10.7	11.8	11.6	...	...
Musculoskeletal system and connective tissue	18.7	19.2	19.8	19.4	...	...
Nervous system and sense organs	15.4	16.5	17.7	16.8	...	...
Other ^c	23.3	22.7	21.1	22.1	...	...
Difficulty with any instrumental activities of daily living (IADLs)	94.1	93.5	94.3	94.1	0.842	0.0
Standing for long periods	85.3	83.0	83.3	83.8	0.501	0.2
Climbing a flight of stairs	79.8	77.9	77.5	78.3	0.550	0.3
Lifting or carrying 10-pound package	62.5	60.5	63.7	62.7	0.543	0.3
Preparing meals	31.5	36.9	39.6	36.6***	0.005	0.2
Using public transportation	35.1	34.1	38.2	36.4	0.265	2.6
Taking medication	34.6	36.2	33.5	34.4	0.632	0.1
Riding as a passenger in a car	20.2	20.5	21.9	21.1	0.664	0.2
Using the telephone	6.7	7.5	7.3	7.1	0.852	0.1

(Continued)

no substantive differences in unmet medical needs between the three participant groups.

Six-Month Follow-up Survey

MPR conducted a 6-month follow-up survey to gather timely information about the design and implementation of the intervention and to assess early impacts on health care utilization and unmet health care needs. To determine if the plan needed any modifications, we assessed participant satisfaction with plan design and implementation. The survey consisted of topic modules, with pertinent program topics comprising medical service use, unmet medical needs, health insurance coverage, and satisfaction with AB services. We planned to survey 600 participants (240 control, 120 AB, 240 AB Plus).¹⁷ MPR conducted the surveys using computer-assisted telephone interviewing (CATI). Survey operations began in October 2008 and were completed in January 2009. A total of 483 surveys (80.5 percent) were completed, covering 194 control group, 96 AB, and 193 AB Plus participants. MPR reported that nonrespondents included 5 refusals, 14 who were deceased, and 98 who were alive according to administrative records but could not be contacted.

Use of Benefits by Program Participants

Most of the participants who received the health benefits package through the project used at least one of the services that were available (86.5 percent of the AB Plus group and 87.3 percent of the AB group), as shown in Table 7. The survey also captured user satisfaction rates. We intended to use this information to make any necessary adjustments to the provision of services. However, satisfaction rates with the services provided were very high (mostly above 90 percent) with little variation between AB and AB Plus users.¹⁸ We view these results as indicating that our contractor and subcontractors delivered the AB and AB Plus services as we intended.

The most commonly used service for participants in both groups was the prescription drug benefit, followed by primary care and specialty care. It is somewhat surprising that the service-use rates of the program groups are very similar. During the design phase, our technical advisory group and contractor indicated that the MCM model would increase use of available health benefits. We thought this would be particularly true in our study because participants did not have health insurance and perhaps had limited recent experience

Table 4.
Selected health characteristics of Accelerated Benefits (AB) project participants at baseline, by study group—Continued

Characteristic	AB Plus group	AB group	Control group	Total	P-value	Percentage missing ^a
Self-reported personal or emotional problems in last 4 weeks (%)						
Personal or emotional problems resulted in accomplishing less in daily activities	82.0	78.7	81.6	81.1	0.376	0.9
Personal or emotional problems affected daily activities—						
Total	100.0	100.0	100.0	100.0	0.688	0.2
A lot	37.0	34.3	33.9	34.9	...	...
Some	24.3	26.5	24.9	25.0	...	...
A little	16.0	15.3	15.7	15.7	...	...
Not at all	8.6	11.8	10.6	10.2	...	...
Could not do daily activities	14.2	12.3	14.9	14.2	...	...
Sample size	615	401	988	2,004		

SOURCE: MDRC calculations based on Social Security administrative data and Mathematica Policy Research, Inc., AB demonstration project baseline survey, October 2007–January 2009.

NOTES: ... = not applicable.

Totals do not necessarily equal the sum of rounded components.

A chi-square test for categorical variables and a t-test for continuous variables were run to determine whether there was a difference in the distribution of the characteristics across study groups. Statistical significance is indicated as *** = 1 percent level. For categorical characteristics, the p-value and percentage missing apply to category totals only.

Additional tests were run to determine whether there was a difference in the distribution of the characteristics between specific pairs of study groups.

The following tests were statistically significant:

Test	P-value
<i>AB Plus versus AB</i>	
Difficulty preparing meals	0.077
<i>AB Plus versus control</i>	
Primary diagnosis	0.061
Difficulty preparing meals	0.001

- Missing values are due to survey responses of "don't know" or refusals to answer the question. Respondents with missing values were excluded from calculations of percentage distributions, means, and tests of statistical significance of differences across study groups.
- Excludes mental retardation, which is categorized as "Other."
- Includes congenital anomalies; endocrine, nutritional, and metabolic diseases; injuries; mental retardation; diseases of the blood and blood-forming organs, digestive system, genitourinary system, respiratory system, and skin and subcutaneous tissue; infectious and parasitic diseases; human immunodeficiency virus/acquired immune deficiency syndrome (HIV/AIDS); and other diagnoses.

in dealing with health care providers. The similarity in health benefits use among the groups may be due to a common unsatisfied demand for services resulting from the lack of health insurance. In addition, within 6 months of enrollment, only 20.7 percent of the participants had used the MCM services.

The high rate of use of the CareGuide coaches (78.1 percent) shown in Table 7 may reflect the fact that these coaches were part of the AB Plus intake process. The coaches did an initial assessment to determine

whether the participant needed referral to the MCM nurses or was ready to begin the PGAP program.

Control Group Members Getting Health Insurance

At the time of random assignment, no participants had health insurance coverage. Table 8 shows the percentage of participants in the treatment group (that is, members of either the AB or AB Plus groups) and in the control group who reported that they were able

Table 5.
Health insurance history of Accelerated Benefits (AB) project participants, by study group

Characteristic	AB Plus group	AB group	Control group	Total	P-value	Percentage missing ^a
Type of last health insurance coverage (%)						
Never insured	3.8	4.0	3.9	3.9	0.984	1.1
Any private	85.7	81.7	86.5	85.3*	0.071	0.3
Beneficiary's current/former employer	63.0	60.4	65.7	63.8	0.160	0.3
Spouse's current/former employer	6.8	8.3	7.0	7.2	0.651	0.3
Self- or family-paid	4.4	3.3	3.5	3.7	0.542	0.3
COBRA	7.7	6.5	6.8	7.0	0.738	0.3
Other	4.6	4.3	4.2	4.3	0.929	0.3
Any public	11.7	15.8	10.5	11.9**	0.021	0.3
Medicare or Medicaid	7.0	9.8	7.8	8.0	0.274	0.3
Military health care benefits	1.0	0.8	0.4	0.7	b	0.3
Indian Health Service	0.0	0.0	0.1	0.1	b	0.3
Workers' compensation	1.1	1.3	0.8	1.0	0.694	0.3
Other state plan	2.6	4.0	1.3	2.3***	0.007	0.3
Date of last health insurance coverage (%)						
Total	100.0	100.0	100.0	100.0	0.567	1.1
Less than 6 months ago	36.8	40.2	34.0	36.1	...	...
6 months to less than 1 year ago	25.6	23.6	27.7	26.2	...	...
1 year to less than 2 years ago	13.0	14.3	14.0	13.8	...	...
2 or more years ago	20.8	17.8	20.4	20.0	...	...
Never insured	3.8	4.0	3.9	3.9	...	...
Sample size	615	401	988	2,004		

SOURCE: MDRC calculations based on Social Security administrative data and Mathematica Policy Research, Inc., AB demonstration project baseline survey, October 2007–January 2009.

NOTES: COBRA = Consolidated Omnibus Budget Reconciliation Act; ... = not applicable.

Totals do not necessarily equal the sum of rounded components. The sums of the values by coverage type may exceed the "any public" and "any private" subtotals because beneficiaries may have had more than one type of coverage. Likewise, the sum of the "any public" subtotal, the "any private" subtotal, and "never insured" may exceed 100 because beneficiaries may have had both public and private coverage.

A chi-square test for categorical variables and a t-test for continuous variables were run to determine whether there was a difference in the distribution of the characteristics across study groups. Statistical significance levels are indicated as * = 10 percent, ** = 5 percent, and *** = 1 percent. For categorical characteristics, the p-value and percentage missing apply to category totals only.

Additional tests were run to determine whether there was a difference in the distribution of the characteristics between specific pairs of study groups.

The following tests were statistically significant:

Test	P-value
<i>AB Plus versus AB</i>	
Last health coverage was a private plan	0.092
Last health coverage was a public program	0.063
<i>AB Plus versus control</i>	
Last health coverage was another state plan	0.061
<i>AB versus control</i>	
Last health coverage was a private plan	0.023
Last health coverage was through beneficiary's employer	0.063
Last health coverage was a public program	0.006
Last health coverage was another state plan	0.002

a. Missing values are due to survey responses of "don't know" or refusals to answer the question. Respondents with missing values were excluded from calculations of percentage distributions, means, and tests of statistical significance of differences across study groups.

b. Tests of statistical significance were not performed for differences among study groups because sample sizes were too small.

Table 6.
Unmet medical and prescription needs of Accelerated Benefits (AB) project participants in the 6 months before entering demonstration, by study group

Characteristic	AB Plus group	AB group	Control group	Total	P-value	Percentage missing ^a
Percentage of participants reporting—						
Any unmet medical need	71.1	69.8	69.8	70.2	0.859	0.0
Postponed getting medical care	58.1	57.9	57.4	57.7	0.959	0.2
Did not get medical care	47.5	47.6	46.5	47.0	0.907	0.5
Referred to doctor, but did not go	17.8	17.5	15.4	16.5	0.397	0.1
Referred for surgery, but did not go	16.8	18.3	15.6	16.5	0.459	0.3
Referred for tests, but did not go	10.5	8.8	8.6	9.2	0.441	0.3
Did not get or postponed medical care	64.4	64.8	64.9	64.7	0.979	0.0
Any unmet prescription need	69.3	69.3	70.4	69.9	0.853	0.0
Used prescription less than prescribed	55.6	52.6	53.4	53.9	0.580	0.0
Did not fill prescription when first prescribed	52.3	54.6	54.3	53.7	0.685	0.1
Did not refill prescription	51.9	52.3	51.0	51.5	0.897	0.0
Did not fill entire prescription	46.0	48.3	48.7	47.8	0.560	0.1
Sample size	615	401	988	2,004		

SOURCE: MDRC calculations based on Social Security administrative data and Mathematica Policy Research, Inc., AB demonstration project baseline survey, October 2007–January 2009.

- a. Missing values are due to survey responses of "don't know" or refusals to answer the question. Respondents with missing values were excluded from calculations of percentage distributions, means, and tests of statistical significance of differences across study groups.

Table 7.
Percentage of Accelerated Benefits (AB) project participants reporting use of health benefits and additional services in the demonstration's first 6 months, by health plan group

Benefit or service	AB Plus	AB
Used any plan benefits (%)	86.5	87.3
Primary care	70.2	67.4
Specialty care	55.1	52.8
Mental health care	13.5	18.7
Dental care	17.4	19.8
Vision care	19.0	18.6
Prescription drug	76.2	74.6
Rehabilitation care	12.5	13.3
Medical equipment	12.6	8.3
Used any of the three additional services ^a (%)	81.1	...
CareGuide ^b	78.1	...
Employment and benefit counseling	31.2	...
Medical care management	20.7	...
Sample size	193	96

SOURCE: Mathematica Policy Research, Inc., AB demonstration project 6-month followup survey, October 2008–January 2009.

NOTES: ... = not applicable.

Sample sizes vary according to benefit use. Estimates are weighted for nonresponse.

- a. Respondents were considered to have "any use" of each of the three services if they reported they had "been in touch" with the staff. Use of the individual services was indicated if participants reported "interactions" with coaches, counselors, or nurses who provided those services.
- b. May reflect the intake assessment, use of the Progressive Goal Attainment Program, and other contacts in which the coach helps coordinate participant's access to the other AB components.

Table 8.
Percentage of Accelerated Benefits (AB) project participants who obtained nonproject health insurance in the demonstration's first 6 months, by study group

Type of coverage	AB and AB Plus combined	Control group	P-value
Any nonproject insurance ^a	15.8	24.2	0.020**
Private insurance ^b	1.5	15.0	<0.001***
Public insurance ^c	14.9	10.7	0.180
No nonproject insurance	84.2	75.8	0.020**
Sample size	289	194	

SOURCE: Mathematica Policy Research, Inc., AB demonstration project 6-month followup survey, October 2008–January 2009.

NOTES: Estimates are regression adjusted to account for chance baseline differences across the study groups and weighted for nonresponse. A small percentage of cases had missing values; these were interpreted as not having coverage. The p-value column represents the probability that the differences between the characteristics of the treatment and control groups are different from zero.

A chi-square test for categorical variables and a t-test for continuous variables were run to determine whether there was a difference in the distribution of the characteristics across study groups. Statistical significance levels are indicated as ** = 5 percent and *** = 1 percent.

- The sum of private and public insurance exceeds the "any nonproject insurance" total because some participants obtained both types.
- Includes coverage provided by the beneficiary's or spouse's current/former employer, self- or family-paid coverage, and Consolidated Omnibus Budget Reconciliation Act of 1985 (COBRA) plans.
- Includes Medicare, Medicaid, Medi-Gap, military health care, Indian Health Service, workers' compensation, and other state programs.

to obtain some other type of health insurance during the first 6 months. We were somewhat surprised that 24.2 percent of the control group was able to obtain health insurance coverage within 6 months of random assignment; 10.7 percent of control group members, or nearly half (about 44 percent) of control group members who obtained health insurance, were covered through a public source. Apparently, we underestimated the likelihood that DI beneficiaries might become qualified for Medicaid through "spend down" provisions, or covered under other state programs. Table 8 also shows that 15.0 percent of all control group members reported obtaining some type of private health insurance coverage, accounting for about 62 percent of the control group who had health insurance coverage.¹⁹ Although we expected this to be difficult because of their health status, apparently we underestimated the likelihood that participants would purchase coverage from a former employer (through COBRA) or obtain it through a spousal plan. The small percentage (1.5) of treatment group members who picked up additional private insurance reflects the fact that these plans are costly and would likely duplicate the services provided by the AB package.

Use of Medical Services

Participants in the project's treatment group took advantage of the available medical services within the

first 6 months of enrollment. The use of health care services shown in Table 9 reflects the fact that the participants had health conditions that needed medical attention. Within 6 months of random assignment, 91.9 percent of the treatment group had seen a doctor, and 90.2 percent reported regular use of prescription drug benefits. Emergency room visits were reported by 36.6 percent of treatment group members, and 23.3 percent had been admitted to the hospital.

Although the reported use of medical services differs between the treatment group and the control group, almost the same share—84.9 percent—of the control group saw a doctor during this period; and while 82.3 percent of the treatment group reported a "regular source of care," 71.7 percent of the control group also responded affirmatively. However, while exactly 60 percent of the treatment group reported three or more visits during this 6-month period, only 41.9 percent of the control group reported that level of care. Thus, although both groups reported they were able to obtain medical care, their responses seem to indicate that health insurance may provide access to a higher level of service, which might result in fewer "unmet needs."

It is frequently reported that uninsured people often use the emergency room for routine health care issues; however, the survey surprisingly showed higher levels of emergency room use in the treatment group (36.6 percent) than in the control group (27.8 percent).

Table 9.
Percentage of Accelerated Benefits (AB) project participants using selected health care services in the demonstration's first 6 months, by study group

Service	AB and AB Plus combined	Control group	P-value
Ambulatory care			
Saw a doctor	91.9	84.9	0.020**
Had a regular source of care	82.3	71.7	0.010***
Number of visits			
1 or 2 visits	22.3	30.0	0.060*
3 or more visits	60.0	41.9	<0.001***
No regular source of care	17.8	28.0	0.010***
Changed source of usual medical care in the past 6 months	13.3	6.4	0.020**
Saw an internist, general practitioner, or family doctor	67.1	57.0	0.020**
Saw a specialist or another type of doctor	67.4	61.6	0.180
Saw a psychologist, psychiatrist, or social worker	22.6	23.3	0.840
Regularly took prescription medications	90.2	80.0	0.002***
Nonambulatory care			
Visited emergency room	36.6	27.8	0.040**
1 or 2 times	34.2	27.6	0.130
3 or more times	2.1	0.5	0.150
Never visited emergency room	63.7	71.9	0.060*
Admitted to hospital	23.3	15.8	0.040**
1 or 2 times	22.8	13.8	0.014**
3 or more times	0.4	2.1	0.080*
Never admitted to hospital	76.9	84.1	0.015*
Sample size	289	194	

SOURCE: Mathematica Policy Research, Inc., AB demonstration project 6-month followup survey, October 2008–January 2009.

NOTES: Estimates are regression adjusted to account for chance baseline differences across the study groups and weighted for nonresponse. The p-value column represents the probability that the differences between the characteristics of the treatment and control groups are different from zero. A small percentage of cases had missing values; these were interpreted as nonusage.

A chi-square test for categorical variables and a t-test for continuous variables were run to determine whether there was a difference in the distribution of the characteristics across study groups. Statistical significance levels are indicated as * = 10 percent, ** = 5 percent, and *** = 1 percent.

The difference in hospital admissions was in the expected direction: Only 15.8 percent of the control group was admitted to a hospital, and 23.3 percent of those with health insurance had been admitted.

Unmet Medical Needs

Participants were asked specific questions about whether they either postponed or went without medical or prescription needs. As Table 10 shows, the frequency of reported unmet medical needs for any reason was substantially lower for the treatment group (45.0 percent) than for the control group (63.8 percent). However, even among those with the AB or AB Plus

health plans, a significant percentage reported unmet needs: 51.1 percent reported not filling or refilling a prescription for any reason, 32.2 percent postponed getting medical care, and 19.2 percent did not get medical care. The health plans make a difference, however, as 51.4 percent of the control group did not fill a prescription because of cost, while only 24.8 percent of the treatment group did not fill a prescription because of cost. The difference is smaller for referrals to a doctor for tests or for surgery, and the share of participants in both groups reporting an unmet need is relatively small. In the control group, for example, cost or lack of insurance prevented only 4.0 percent from going to a

Table 10.
Unmet medical and prescription drug needs of Accelerated Benefits (AB) project participants in demonstration's first 6 months, by study group

Need	AB and AB Plus combined	Control group	P-value
Percentage of participants reporting unmet—			
Medical needs			
Any unmet medical need	45.0	63.8	<0.001***
Postponed getting medical care	32.2	58.8	<0.001***
Did not get medical care	19.2	41.5	<0.001***
Referred to doctor, but did not go	12.0	16.4	0.170
Referred for tests and x-rays, but did not go	4.3	9.6	0.010**
Referred for surgery, but did not go	13.7	10.9	0.500
Medical needs due specifically to cost or lack of insurance ^a			
Did not see or postponed seeing a doctor or receiving medical care	34.0	59.7	<0.001***
Referred to doctor, but did not go	3.4	4.0	0.760
Referred for tests and x-rays, but did not go	1.4	8.4	<0.001***
Referred for surgery, but did not go	2.1	7.6	<0.001***
Prescription drug needs ^b			
Did not fill or refill prescription for any reason	51.1	60.5	0.040**
Unmet need for prescription drugs because of cost	24.8	51.4	<0.001***
Did not take prescription for noncost reasons	40.1	32.6	0.090*
Average monthly out-of-pocket costs for prescriptions exceeded \$100	12.5	31.1	<0.001***
Sample size	289	194	

SOURCE: Mathematica Policy Research, Inc., AB demonstration project 6-month followup survey, October 2008–January 2009.

NOTES: Estimates are regression adjusted to account for chance baseline differences across the study groups and weighted for nonresponse. The p-value column represents the probability that the differences between the characteristics of the treatment and control groups are different from zero. A small percentage of cases had missing values; these were interpreted as not having an unmet need.

A chi-square test for categorical variables and a t-test for continuous variables were run to determine whether there was a difference in the distribution of the characteristics across study groups. Statistical significance levels are indicated as * = 10 percent, ** = 5 percent, and *** = 1 percent.

a. Unmet needs are attributed to cost if the respondents reported they did not get care because they did not have health insurance, they could not afford the copay, or the provider did not accept insurance.

b. Includes delaying or not refilling a prescription, or taking less than the prescribed dosage.

doctor after being referred, only 7.6 percent did not go for surgery when referred, and only 8.4 percent did not get a test or x-ray after referral.

In summary, two surprising findings from the 6-month survey are that (1) 24.2 percent of the control group were able to obtain health insurance within 6 months of random assignment, and (2) the control group generally received needed medical care, albeit at a somewhat lower rate, despite not having access to the AB package.

Health Benefit Expenditures

The costs of providing accelerated health benefits were higher than we expected. As the project began, we estimated that the costs of providing the AB package

would be about \$24,000 per person from the time of enrollment to the end of the 24-month Medicare waiting period. We based our estimate on recent studies that used secondary data sources to estimate the costs of the waiting period.²⁰ Our data show that the actual per-person costs exceed \$30,000. About 30 percent of the total costs are due to the 9.0 percent of the treatment group members who reached the \$100,000 cap that we placed on the AB package.

We examined the characteristics of those who reached the cap to better understand why they reached the maximum. Five diagnostic categories account for 79.3 percent of those reaching the maximum (Table 11). Nearly 24 percent of the participants reaching the maximum have a malignant neoplastic disease, 18.5 percent have cardiovascular conditions,

Table 11.
Participants in the Accelerated Benefits (AB) project treatment groups who reached the maximum benefit, by primary diagnosis

Primary diagnosis	Number	Percentage distribution	Percentage within the primary diagnosis group
Cardiovascular impairments	17	18.5	21.3
Malignant neoplastic diseases	22	23.9	22.7
Mental disorders	11	12.0	5.0
Musculoskeletal impairments	11	12.0	5.6
Neurological impairments	12	13.0	8.7
Other	19	20.7	6.6
Total	92	100.0	9.0

SOURCE: Authors' calculations based on data from the AB demonstration project.

NOTE: Totals do not necessarily equal the sum of rounded components.

and 13.0 percent have neurological impairments. The mental disorders and musculoskeletal impairment categories each account for an additional 12.0 percent.

We also examined the incidence of reaching the cap for each diagnostic category identified in Table 11. Of all participants with malignant neoplastic disease (cancer), 22.7 percent reached the cap. Participants with a cardiovascular impairment were a close second, with 21.3 percent reaching the maximum.

The speed with which AB beneficiaries reached the maximum benefit indicates additional costs they would have incurred during the rest of the waiting period. On average, these participants reached the limit in just over 12 months. Because this period may vary by health condition, we calculated the average time for each diagnostic category. Chart 5 shows a box and whiskers plot of these data. On average, participants with malignant neoplastic disease reached the maximum sooner than beneficiaries with other primary diagnoses. The median period for reaching the maximum benefit for participants with malignant neoplastic diseases was just 9 months after random assignment into the project. We conclude that without the \$100,000 limit, costs might have been substantially higher given the length of time left in the waiting period.

One explanation for the substantial share of participants reaching the maximum is the costliness of end-of-life care. The two most prevalent conditions among beneficiaries who reach the maximum, malignant neoplastic disease and cardiovascular conditions, have relatively high short-term mortality rates. About 45 percent of individuals with malignant neoplastic disease and about 9 percent of those with

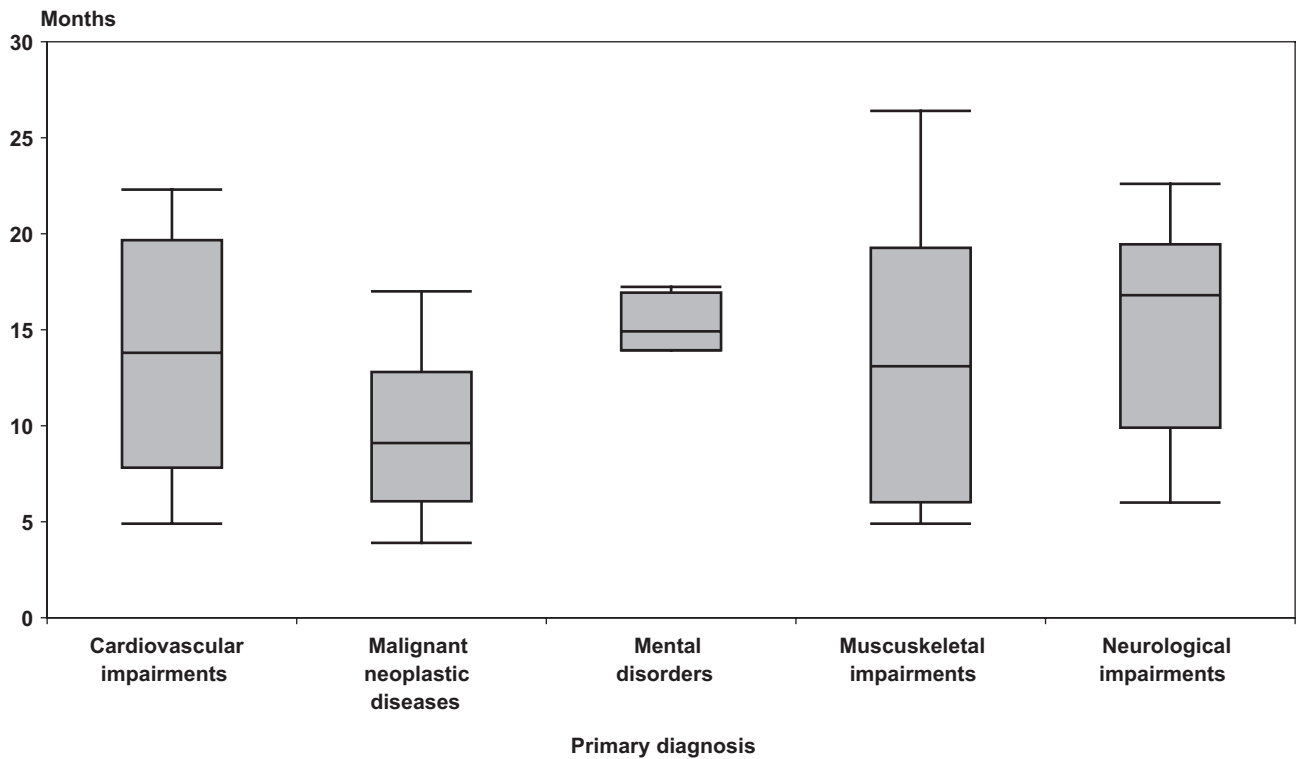
cardiovascular conditions died during the Medicare waiting period, both exceeding the overall incidence of 7.8 percent. We suspect that the cost estimates we used to budget for the AB project did not properly account for end-of-life care expenses. More conclusive analysis will require information on the full medical costs, which will become available at the end of the project.

Discussion and Conclusions

Congress authorized SSA to conduct a demonstration project to assess the relative benefits and costs of altering the 24-month Medicare waiting period for DI beneficiaries. With this authority, SSA designed and conducted the Accelerated Benefits demonstration. Prior to conducting the study, we examined available information on the Medicare waiting period from news stories, qualitative and quantitative research, and the “purpose and findings” section of the Ticket to Work and Work Incentives Improvement Act.²¹ Based on this information, we expected to find that many beneficiaries would not have health insurance coverage, and would not be able to obtain it, during the waiting period. We expected that the AB package would increase the use of health care services by beneficiaries and reduce their unmet medical needs during the first 6 months of the AB demonstration. We also expected that the majority of beneficiaries who did not have health insurance would have very limited access to health care during the waiting period.

According to the 6-month survey, our contractor and subcontractors delivered the AB services to almost all eligible beneficiaries and the vast majority of beneficiaries were satisfied with them. The data show that within 6 months of AB enrollment, about 87 percent of participants who were eligible for

Chart 5.
Number of months to reach the \$100,000 spending limit, by primary diagnosis



SOURCE: Authors' calculations based on Accelerated Benefits demonstration project data.

NOTE: The dark midline in the shaded rectangles represents the distribution's median value. The top and bottom edges of the shaded rectangles respectively represent the 75th and 25th percentile values. The top and bottom of the vertical lines respectively represent the upper and lower adjacent values, equal to 1.5 times the interquartile range beyond the 75th and 25th percentile values.

services received them, and over 90 percent of the group receiving services reported satisfaction with them. We are therefore confident that the findings from the AB demonstration are unlikely to be affected by any problems with the administration of services.

Only 12.7 percent of beneficiaries identified for the study did not have health insurance coverage at the time we contacted them, and almost 25 percent of them were able to obtain it by the time we recontacted them 6 months later. We suspect this may stem from our selection of beneficiaries who quickly had a favorable outcome on their initial disability decision; that is, it excluded beneficiaries who did not receive a benefit award until after the 6th month of DI entitlement.²² Individuals with health insurance coverage might have complete medical evidence, making it easier for the disability examiner to decide favorably on their case. If our suspicions are correct, then eliminating the Medicare waiting period may help some beneficiaries but it may not close the gap in their health insurance coverage. The provisions for wider health care access

in the recently passed Affordable Care Act might fill the gap more effectively. Indeed, our baseline data on the household income of AB participants indicate that the majority would be eligible for subsidies under the new law.

Our data show that the AB package increased access to medical care and reduced unmet medical needs. Although the effects were substantial in some cases, we expected to see larger differences in these outcomes. Our hypothesis was that, without the AB package, few beneficiaries would report having access to medical care and almost all would report some type of unmet medical need. In fact, we found that some who did not have the AB package were able to obtain health care and had only modest levels of unmet medical needs in the first 6 months of the study. In future research, we hope to examine the ways that beneficiaries without health insurance obtain health care and the resulting economic impact.

The costs of providing accelerated health benefits were higher than we expected. At the onset of the

project, we estimated that the costs of providing the AB package would be about \$24,000 per person. Our data show that actual costs are over \$30,000 per person. About 30 percent of the total costs are due to the 9.0 percent of the sample who reached the \$100,000 cap that we placed on the AB package. Most of these expenditures appear to be driven by end-of-life care for those with various types of cancers (neoplasms) or with cardiovascular conditions. Without the \$100,000 cap, the costs of providing accelerated health benefits would be substantially higher.

We did not expect to see a substantial change in employment or benefit receipt within the first 6 months of the project, and we did not include questions on preventive care and relative quality of care in the 6-month follow-up survey. We expected that most newly entitled beneficiaries would need time to obtain the health care needed to address their disabling condition, seek rehabilitation services, and adjust to their disabling condition. In future research, we plan to use the 12-month follow-up survey to examine the impact of the AB health plan on preventive care and relative quality of care. We also plan to study the longer-term effect of AB on employment and benefit use. We are particularly interested in potential reductions in post-waiting period Medicare expenditures resulting from the care provided through accelerated health benefits.

This article presents data from the early stages of the project. We will have more project information in 2011 when MDRC completes its final report. However, we will continue to examine the impact of AB on long-term employment and program participation outcomes after the final report is released.

Notes

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¹ Social Security Act Section 223(d)(1) defines a disability as the inability to engage in any substantial gainful activity either “by reason of any medically determinable physical or mental impairment which can be expected to result in death or which has lasted or can be expected to last for a continuous period of not less than 12 months” or because of blindness. The 24-month Medicare waiting period is waived for beneficiaries with end-stage renal disease or Amyotrophic Lateral Sclerosis, and for some beneficiaries with a prior entitlement due to disability. For

more information on the history of the 24-month Medicare waiting period, see Szymendera (2007).

² COBRA allows individuals to continue health insurance coverage through an employer’s group plan for 18 months. Individuals may be required to pay the entire premium (that is, their share and the employer’s share) plus a 2 percent administrative fee. The law allows DI beneficiaries to continue coverage for 11 additional months, but the costs can increase to 150 percent of the premium during the 11-month extension. Although the 2009 economic stimulus package included federal subsidies of COBRA covering certain individuals who lost a job, it did not include special provisions for DI beneficiaries.

³ In this article, “we” refers broadly to the SSA Office of Program Development and Research team that oversees the AB demonstration.

⁴ See Stapleton and others (forthcoming) for more information on the relationship between age and employment among DI beneficiaries.

⁵ See Riley (2006) for more information on the relationship between health insurance status and unmet medical needs among DI beneficiaries.

⁶ Members of our technical advisory panel include John F. Burton, Jr., Walton Francis, Larry Fricks, Jay Himmelstein, John D. Kemp, Richard Luecking, Joseph Newhouse, Mary Beth Senkewicz, and Michael Sullivan.

⁷ Emergency situations were an exception to this rule. POMCO, an AB subcontractor, received many requests for gastrointestinal bypass surgery. POMCO denied these requests and this surgery was eventually excluded.

⁸ Coaches are social workers and psychologists.

⁹ For more information on estimating induced entry, see Moffitt (1992) and Tuma (2001).

¹⁰ We accepted the beneficiaries’ self-reported health insurance status because we had no avenue of independent verification. Beneficiaries who completed the baseline survey received \$20 for participating.

¹¹ Because there were 66 Phase 1 beneficiaries, only 1,934 Phase 2 beneficiaries were needed to reach the recruitment goal of 2,000. We ultimately enrolled 1,939 Phase 2 beneficiaries.

¹² The drawback of recruiting from major metropolitan areas is that rural areas are underrepresented in the sample. We considered drawing a nationally representative sample, but MDRC advised using a purposeful sample based on (1) the need to identify a sample of 2,000 beneficiaries, (2) service delivery burden, and (3) the costs of follow-up data collection activities. Our final sample provides regional diversity, and the areas covered represent a large share of the beneficiary population.

¹³ Some beneficiaries do not have a Medicare waiting period (see note 1), and others may meet the eligibility standards to qualify for Medicaid coverage.

¹⁴ As a neoplasm is an “abnormal growth or mass of body tissue,” this diagnostic category includes malignant cancers.

¹⁵ See <http://www.healthcare.gov/> for more information about the Affordable Care Act.

¹⁶ Most had had coverage through Medicaid and no longer met the income limits for Medicaid eligibility.

¹⁷ We used a subsample of the early AB enrollees for this survey because the primary purpose was to assess the administration of AB services.

¹⁸ Because the satisfaction rates were mostly over 90 percent, we did not include them in Table 7. The results are available from the authors upon request.

¹⁹ Some control group members reported both public and private health insurance coverage.

²⁰ Our original estimate exceeds Riley’s (2004) estimate of \$10,055 (in 2000 dollars), but his estimate does not include the Medicare Part D benefit. After inflating our estimate to account for rising health care costs and the cost of Medicare Part D, our original estimate was similar to the \$18,854 (in 2006 dollars) estimated by Livermore, Stapleton, and Claypool (2009), which also accounts for the Part D benefit.

²¹ In addition to the sources cited elsewhere in this article, see Williams and others (2004) and Hayes, Beebe, and Kreamer (2007).

²² Individuals who were awarded benefits after appealing the initial decision are not included in our sample.

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THE DECISION TO EXCLUDE AGRICULTURAL AND DOMESTIC WORKERS FROM THE 1935 SOCIAL SECURITY ACT

by Larry DeWitt*

The Social Security Act of 1935 excluded from coverage about half the workers in the American economy. Among the excluded groups were agricultural and domestic workers—a large percentage of whom were African Americans. This has led some scholars to conclude that policymakers in 1935 deliberately excluded African Americans from the Social Security system because of prevailing racial biases during that period. This article examines both the logic of this thesis and the available empirical evidence on the origins of the coverage exclusions. The author concludes that the racial-bias thesis is both conceptually flawed and unsupported by the existing empirical evidence. The exclusion of agricultural and domestic workers from the early program was due to considerations of administrative feasibility involving tax-collection procedures. The author finds no evidence of any other policy motive involving racial bias.

Introduction

In recent years, some scholars have argued that the U.S. Social Security program—like some other social institutions—is biased against women and African Americans. One major contention along these lines involves the original coverage exclusions of the Social Security Act of 1935.

The 1935 act limited its provisions to workers in commerce and industry (this is what is known as the program’s “coverage”). This meant that the new social insurance program applied to about half the jobs in the economy. Among those left out were farm and domestic workers. Contemporary scholars have looked at this provision of the 1935 act, realized that a disproportionate number of African Americans were in these two occupational groups, and concluded that the disproportionate impact is evidence of a racial bias as the motive for this coverage exclusion.

An important key to the argument is the additional assumption that Southern Democrats in Congress were the agents who engineered this restrictive coverage policy. Thus, the full argument is that Southern Democrats in Congress—motivated by racial animus—moved to block African Americans from participation

in the new Social Security program and that this was the reason for the provision excluding farm and domestic labor (Gordon 1994; Brown 1999; Lieberman 1995; Williams 2003; Poole 2006).

The Race Explanation

The description of Social Security’s restrictive coverage policy has become so epigrammatic that it has passed over from historical narrative to background historical fact; it has been assumed and repeated as a basic datum about the program’s origin.

For example, one recent labor-history text summed up the issue of Social Security and race this way:

The Social Security Act was also racially coded—in part because of the power of Southern Democrats in the New Deal coalition. Southern politicians, reported one architect of the new law, were determined to block any ‘entering wedge’ for federal interference with the handling of the Negro question. Southern employers worried that federal benefits would discourage black workers from taking low-paying jobs in their fields, factories, and kitchens. Thus

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neither agricultural laborers nor domestic servants—a pool of workers that included at least 60 percent of the nation’s black population—were covered by old-age insurance. (Lichtenstein and others 2000, 429)

One of the strongest early statements of the thesis was given by Robert C. Lieberman (1995, 514–515), who asserted, “The Old Age Insurance provisions of the Social Security Act were founded on racial exclusion. In order to make a national program of old-age benefits palatable to powerful Southern congressional barons, the Roosevelt administration acceded to a Southern amendment excluding agricultural and domestic employees from OAI coverage.”

Linda Gordon (1994, 514–515) in her influential study of the welfare state, merged a discussion of the public assistance titles of the 1935 Social Security Act with the contributory social insurance title and offered a misleading critique of both: “Social Security excluded the most needy groups from all its programs, even the inferior ones. These exclusions were deliberate and mainly racially motivated, as Congress was then controlled by wealthy southern Democrats who were determined to block the possibility of a welfare system allowing blacks freedom to reject extremely low-wage and exploitive jobs as agricultural laborers and domestic servants.”

Alston and Ferrie (1999, chapter 3), in their book *Southern Paternalism and the American Welfare State*, offered a variation on this account. They argued that class—in the form of racially based landlord/tenant paternalism—played a stronger role than simple race prejudice or other factors, such as federalism, in shaping the programs under the Social Security Act in general and relative to the coverage exclusions in particular.

Probably the best detailed look at the exclusion issue in the academic literature is provided by Lieberman (1998)—*Shifting the Color Line*. Lieberman did not suggest that any members of Congress were the direct agents of the coverage exclusions, although he did imply that the coverage exclusions were some-how engineered by Southern members of Congress. Here, for example, is one way he described the exclusions: “the CES’s [Committee on Economic Security] decision that all workers should be covered came under immediate and persistent question at the hearings ... In the end, an important step behind congressional acceptance of a national program of old-age insurance was the racial manipulation of the program’s target

population so that a national program was sure to be a segregated one” (39). At another point he summarized the history this way: “In order to pass national old-age and unemployment insurance plans, the Roosevelt administration had to compromise inclusiveness and accept the exclusion of agricultural and domestic employees from the program, with notably imbalanced racial consequences” (25).

As we will see, these kinds of generalizations overlook the degree to which members of the Roosevelt administration were the principal advocates of the coverage exclusions—the administration did not have to “accept” the exclusions; *it was the source of the idea*.

This thesis has worked its way, unquestioned, into general-interest and survey-history texts. Matters have reached such a state that if a survey-history text makes three or four general observations about Social Security, one of them will often be that African Americans were excluded from participation via the coverage exclusions owing to racist motivations on the part of Southern members of Congress. This thesis thus becomes one of the few “facts” that beginning students of history learn about the Social Security program.

Typical of the treatment the subject receives in some general history books is Gordon and Paterson’s *Major Problems in American History 1920–1945*. The authors introduced their selections on Social Security with this summing up:

Before and after 1935, the New Deal was always dependent upon the votes of conservative Southern Democrats ... but Southerners saw the labor and welfare legislation of 1935 as a clear threat to Southern race relations and economic competitiveness. In many respects, Southern legislators were able to shape federal law (winning both the exemption of agricultural and domestic workers from Social Security and local control over its administration, for example). (1999, 304)

Gordon and Paterson (1999, 304–305) then provided as their underlying source document an excerpt from Edwin Witte’s (1962) memoir of the development of the Social Security Act.¹ In this document, according to the authors, “one of the drafters of the Social Security Act explains how both political and administrative considerations led to the exemption of agricultural and domestic workers.”

Gareth Davies and Martha Derthick (1997, 217–235) examined some key aspects of the racial-bias thesis and put the decisions made in the 1935 Social Security Act in comparative international perspective; they gave an overview of how the coverage exclusions came about, as well as a differing explanation of how and where racial concerns were in play in the Congress (in the welfare provisions of the 1935 act). The authors argued that race was relevant in shaping the welfare provisions; but they also argued that nonracial factors—such as federalism and state-specific economic considerations—were more significant determinants.

Perhaps the most pertinent contribution of Davies and Derthick was to make clear the distinction between the contributory Social Security program and the various public assistance provisions and to point out that Southern Democrats in the Congress were not the source of the Title II coverage exclusions. Unfortunately, many scholars are still confused about the distinction between the public assistance programs and the contributory social insurance program under the 1935 act.²

Understanding the Social Security Act

The Social Security Act of 1935 was an omnibus bill, containing 11 titles authorizing 7 distinct programs, only 1 of which (Title II) was the program we commonly think of as Social Security.³ These various programs had unique features that make presumed equivalences among them sources of serious error.

The Title II program was a new form of federal social provision in which workers and their employers paid taxes into an insurance fund that would pay the workers retirement benefits in the future, typically after many years of paying into the system (when the worker had attained age 65). Title I was the more familiar state-based welfare program that paid immediate benefits to the needy elderly, using some federal money and some federal policy oversight. Title III was likewise a new program of unemployment benefits administered as state programs, but funded by federal dollars (and governed by federal mandates).

Because Title II was the only exclusively federal program in the 1935 act, all of its policies were federal with no state administration or policy involvement. The Title I and Title III programs, by contrast, were state-administered and partially federally financed, so there was both state and federal policymaking involved, and conflicts over federalism and related issues arose in those programs. For example, initially the Roosevelt administration proposed a federal

standard that the welfare payments under Title I should be sufficient to provide “a reasonable subsistence compatible with decency and health.” Some Southern legislators found this language potentially threatening to economic and social arrangements in their region. Much of this concern may well have been racially motivated, but this issue had nothing to do with the Title II program, in which such policy constructions had no role.

It is important to make these distinctions because, as it turns out, many of the claims of racial bias in the coverage decisions involve confusion regarding these programs—or if not outright confusion, oblique arguments that political factors known to have influenced one of the other programs could somehow be presumed to have also been active in shaping the Title II program.

For example, in the quotation from the labor-history textbook cited earlier, Lichtenstein and others (2000) were clearly confusing the Title II coverage issue with features of the Title I old-age welfare benefits when they argued that “Southern employers worried that federal benefits would discourage black workers from taking low-paying jobs in their fields, factories, and kitchens. Thus, neither agricultural laborers nor domestic servants—a pool of workers that included at least 60 percent of the nation’s black population—were covered by old-age insurance.” The worry here was that immediate welfare benefits (under Title I) might be a disincentive to work. But coverage for a potential retirement benefit expected years or decades down the road (Title II) could hardly be a disincentive to present labor—indeed, present labor *is required* in order to build the credits necessary to qualify for a contributory retirement benefit in the future.⁴

Probably the most explicit example of the confusion appears in the Gordon and Paterson quotation previously cited. After making their argument about the central connection between the coverage exclusions and the “Southern concession,” the authors provided the source document underlying their analysis. It is an excerpt from the contemporaneous memoir of Edwin Witte (1962), who was the executive director of the cabinet-level Committee on Economic Security (CES) that President Roosevelt appointed to design his legislative proposals. Here are Witte’s observations, as reprinted in Gordon and Paterson (1999):

In the Congressional hearings and in the executive sessions of the Committee on Ways and Means, as well as in the House debate, the major interest was in the old

age assistance.... Title I of the original bill was very bitterly attacked,... it being very evident that at least some Southern senators feared that this measure might serve as an entering wedge for federal interference with the handling of the Negro question in the South. The Southern members did not want to give authority to anyone in Washington to deny aid to any state because it discriminated against Negroes in the administration of old age assistance.⁵ (312–313)

The thing to notice about this passage is that it has absolutely nothing to do with the contributory social insurance program under Title II of the 1935 act nor with the decision to exclude agricultural and domestic workers from the program. It is a passage describing congressional interest in the old-age assistance provisions under Title I of the act. Senator Harry Byrd (D-VA) and others objected to features of Title I for the reasons Witte states.

The fact that many authors have mistaken the evidence in Witte as showing something it manifestly does not is especially surprising because Witte discussed the Title II coverage exclusions in his book, in the section “Exemption of Agriculture and Domestic Service.” Here is Witte’s (1962) explanation of how the coverage decision came about:

The staff of the Committee on Economic Security recommended that the old age insurance taxes and benefits be limited to industrial workers, excluding persons engaged in agriculture and domestic service. The Committee on Economic Security struck out this limitation and recommended that the old age insurance system be made applicable to all employed persons. This change was made largely at the insistence of Mr. Hopkins, but was favored also by Secretary Perkins.

Subordinate officials in the Treasury, particularly those in charge of internal revenue collections, objected to such inclusive coverage on the score that it would prove administratively impossible to collect payroll taxes from agricultural workers and domestic servants. They persuaded Secretary Morgenthau that the bill must be amended to exclude these groups of workers, to make it administratively feasible. Secretary Morgenthau presented this view in his testimony before the Ways and Means Committee ...

In the executive sessions of the Ways and Means Committee, the recommendations of Secretary Morgenthau were adopted, practically without dissent. (152–154)

So the historical evidence of record tells a very different story than that associated with a racial motivation behind the Title II coverage exclusions. Before we look at the historical evidence in careful detail, we need to examine the logic underlying the race explanation.

Examining the Race Explanation

First, note that the coverage decision made in 1935 was *not* to exclude farm and domestic workers, which, had that been the factual circumstance, might have lent more credence to a charge of racial bias. Rather, the decision was to include only those workers regularly employed in commerce and industry. Thus, the coverage decision also excluded the following.

- Self-employed individuals (including farm proprietors)
- Persons working in the nonprofit sector
- Professionals such as self-employed doctors, lawyers, and ministers
- Seamen in the merchant marine
- Employees of charitable or educational foundations
- Employees of the American Society for the Prevention of Cruelty to Animals
- Persons aged 65 or older
- Casual laborers
- Members of Congress
- Employees of federal, state, and local governments—everyone from the president of the United States to post office clerks

Indeed, of the 20.1 million gainfully employed workers that the president’s Committee on Economic Security estimated were excluded from participation in the Social Security system, at least 15 million were white.⁶

Moreover, African Americans, to the extent that they were members of these other professions, would be excluded from coverage because of their membership. For example, in 1935 African Americans made up about 4 percent of the federal government’s workforce in six of the largest agencies and comprised more than 20 percent of the workers in such agencies as the Government Printing Office. All of these workers were excluded from Social Security coverage

because of their employment, not because of their race (Rung 2002, 73–74). Other African Americans were likewise excluded for reasons having nothing to do with race. The professional employees of the National Association for the Advancement of Colored People (NAACP), for example, were also excluded from coverage on the grounds that they were employed by a nonprofit institution. Indeed, most of the members of President Roosevelt’s informal “black cabinet” were blocked from participating in the Social Security system because they worked in either the federal government or in nonprofit organizations.⁷ The point here is that some African Americans were excluded from the program for *occupational reasons* rather than their race. This lends credence to the idea that the other large group of excluded African Americans (those in agricultural and domestic work) might also have been excluded from coverage because of their occupation features rather than racial bias.

It is true that from the 1930 Census (the closest available data point and the main information base available to Social Security policymakers in 1935), we can observe that about 65 percent of gainfully employed African Americans worked in the agricultural or domestic sectors of the economy. This statistic, stated alone, does create an impression that African Americans might have been the target of the coverage exclusions. But there are a couple of other statistics here that are worth noting. See Table 1, for a more comprehensive view of coverage exclusions.

Although 65 percent of the African American workforce was excluded by this provision, it was also the case that 27 percent of the white workforce was likewise excluded from coverage. Moreover, African

Americans were not the most heavily impacted group: 66 percent of “other” races were excluded as well. Of those individuals excluded under the provision, 74 percent were white, and only 23 percent were African American. This hardly constitutes a compelling initial case for the assumption that the provision targeted African Americans.⁸

Moreover, the coverage exclusions had less impact than the gross 1930 Census numbers suggest because the Bureau of Internal Revenue—subsequent to the passage of the law—had to develop regulations to put the generalities of the law into practical language. They had to define, for example, what type of work was and was not considered “agricultural.” Ultimately the regulations excluded from agricultural work (and hence *included* for participation in Social Security) jobs in industries such as cotton and rice gins; milk bottling, delivery, and sales; growing, harvesting, processing, and packing gum naval stores; chicken hatcheries; raising animals for fur; and several other agricultural-type occupations. The bureau also defined any job that was not in fact agricultural in nature (such as a mechanic, bookkeeper, carpenter, and so forth) as nonagricultural, even if it was performed entirely on a farm (Schurz, Wyatt, and Wandel 1937, 91–97).⁹

Also, occupational categories are not necessarily life assignments; workers in noncovered occupations could earn coverage by working part time in covered jobs, even if their primary occupation was excluded. The Social Security Board (1945, 14) estimated that around 22 percent of agricultural workers had earned some coverage by the end of 1940; about 25 percent of white domestic workers and 13 percent of black

Table 1.
Noncoverage of agricultural and domestic workers, by occupational categories and race

Occupational category	White	Negro [sic]	Other ^a	Total, all races
Agriculture	8,192,181	1,987,839	291,978	10,471,998
Domestic and personal service	3,268,725	1,576,205	197,521	5,042,451
Total workers excluded from coverage	11,460,906	3,564,044	489,499	15,514,449
Percentage of excluded workers	74	23	3	100
Total workers in all occupations	42,584,497	5,503,535	741,888	48,829,920
Excluded workforce as a percentage of total workers	27	65	66	...

SOURCE: Census Bureau (1933, Table 12, p. 24).

NOTE: ... = not applicable.

a. Other category includes Mexicans, Indians, Japanese, Filipinos, Hindus, Koreans, Hawaiians, and so forth.

domestic workers had some covered earnings during the first few years of the program.¹⁰

Finally, if Southerners engineered the coverage exclusion of agricultural and domestic workers out of economic self-interest, we have to question whether or not the coverage exclusions would have been a rational way to proceed. If Social Security coverage was considered to be a positive, the exclusions might have acted as an incentive for workers to leave their agricultural and domestic jobs and seek employment in factory work or in other covered industries. On the other hand—to the extent that future Social Security benefits would be seen as an economic incentive—covering agricultural and domestic workers under Social Security would have served as an incentive to keep them in those jobs. So if racist Southerners were acting out of their economic self-interest here, it would seem more likely that they would have urged coverage of their agricultural and domestic workers, not their exclusion.

The Historical Context of the Coverage Decisions

In order to appreciate the legislative history of the coverage exclusions, the historical context in which the coverage decisions were made should be clarified.

One of the pitfalls here is a tendency to generalize about the South and Southern politicians in ways that are historically inaccurate. Not only was the South not a monolith culturally or politically in the 1930s, neither was the “Southern block” in the U.S. Congress of a single mind or interest. The plantation economy of the Piedmont did not necessarily always have the same economic agendas as the Southern towns whose economies centered around the textile mills. Nor certainly did the planter economy of the Mississippi Delta always have the same political interests as a border state like Delaware.¹¹ Indeed, work by Howard Reiter (2001, 107–130) has up-ended old assumptions about conservative Southern Democrats. Reiter showed that before the late 1930s in the House and the mid-1940s in the Senate, Southern Democrats were actually more liberal than their Northern counterparts. In his study of congressional reform, Julian Zelizer (2004, 22–29 and chapter 2) supported this same insight, observing that outside of the issues of civil rights and unionization, Southern Democrats were generally supporters of New Deal liberal reforms through 1937.

The size and influence of the Southern block has also been exaggerated. On the Senate Finance Committee, 6 of the 21 members were from Southern

states; on the House Ways and Means Committee, only 4 of the 18 members were from the South. The proportions can be inflated here by only considering the Democrats (as Lieberman (1998) did at one point), or by adding in border state members (as Alston and Ferrie (1999) did). But members cannot be aggregated by state without looking at the details behind the generalization. It matters who the specific members were.

For example, Rep. David Lewis of Maryland (the cosponsor of the bill in the House¹²) would be classified as being from a border state; but he was a liberal former coal miner and union official from western Maryland, in a part of the state that had much more in common with Pennsylvania than with Mississippi. And even Mississippi cannot always be assumed to act like Mississippi. Senate Finance Committee Chairman Senator Pat Harrison’s (D-MS) biographer, for example, explicitly rejected the idea that Harrison shared the racial concerns of some Southerners over the bill (Swain 1978, 83).

We should also remember what the voting was on the coverage provision. As Witte (1962) reported, excluding coverage of agricultural and domestic workers was adopted in the House Ways and Means Committee “practically without dissent” and was implicitly adopted unanimously in the Senate Finance Committee (since the Finance Committee never raised the topic). Thus, essentially all the members of both committees—of both parties and all regions of the country—voted in favor of the exclusion, not just Southerners. This suggests the presence of some other motive than Southern racism.

Many scholars also misunderstand the circumstances and attitudes of the historical actors of the 1930s when faced with the novel expansion of the social welfare system represented by contributory social insurance. In fact, many workers and their employers in 1930s America *did not want to be covered* under the Social Security system and would have been relieved to have been in the cohort of the excluded.

Remember that in the 1930s, the Title II program was an unprecedented new form of social provision, in which workers were asked to buy social insurance from the federal government—with employers paying half the cost. Money would be taken out of a worker’s paycheck every payday and sent to the federal government, with the promise that some years hence, the government would pay the worker a retirement pension. In other words, the mechanism of the Social Security program involves a form of what economists

call “deferred consumption,” or what can be described more simply as delayed gratification.

Many workers in Depression-era America were reluctant to take an immediate cut in take-home pay for the promise of a benefit in the distant future. Recall also that the original law of 1935 contemplated payroll-tax withholding beginning in January 1937, but the first monthly retirement benefits were to be paid in 1942. So 1935-era workers not only had to take on faith the idea that they would get a future benefit from the government when they retired, but it was also going to be several years before they could see examples of other people going before them for whom the government had kept its promise.

Indeed, almost all of the disputes, protests, lawsuits, and so forth, involving the program in the early years were efforts by individuals who were in the covered population to *get out* of that population for the reason that they did not want to pay the taxes involved in the new system. Indeed, the three lawsuits that led in 1937 to the U.S. Supreme Court rulings on the constitutionality of the Social Security Act were all lawsuits filed by covered employers seeking to avoid coverage by having the law declared unconstitutional.¹³

During the legislative process, some interest groups lobbied to have their professions *added* to the list of *excluded groups*. Witte (1962, 154–157) detailed, for example, how lobbying by religious organizations led to the exemptions for charitable, educational, and religious institutions. The single most contentious policy debate regarding the Old-Age Insurance program concerned a provision introduced in the Senate excluding from coverage any company with its own private pension plan. This provision, known as the Clark Amendment, was being pushed by insurance interests and, as Witte reported, “a vast amount of lobbying was carried on in connection with this amendment” (105–108). The lobbying and the dispute was so intense that the entire bill was held up in conference for nearly 2 months, while the administration sought some compromise to permit passage of the bill.¹⁴

There is also some evidence that farm proprietors did not want to be covered under the 1935 law. Witte’s (1962) eyewitness report conveyed that proprietors wanted to be excluded to avoid paying the relevant taxes. Also, the American Farm Bureau—the largest lobbying group representing farmers—continuously opposed the coverage of farmers, not only under the 1935 law, but all the way through 1954 when self-employed farmers were finally covered (Altmeyer 1966, 241 and 248). Arthur Altmeyer (the top program

administrator during this period) also indicated that farmers wanted to be excluded for similar reasons. He told an interviewer “we were smart enough politically to know there was no chance of covering the farmers to begin with. They had been excluded traditionally from all forms of regulatory legislation, labor legislation, particularly workmen’s compensation even to this day. No, they’re the last stronghold of individualism, reactionism, independence—whatever you want to call it. I thought when we got them under in 1950 we’d really crossed the mountain.”¹⁵ This point was further illustrated by a story that Altmeyer recounted. During consideration of the 1939 amendments, Altmeyer had been urging extending coverage to agricultural workers. He repeatedly lobbied Ways and Means Committee Chairman Robert Doughton (D-SC) on the issue. At one point Doughton turned to Altmeyer in exasperation and said, “Doctor, when the first farmer with manure on his shoes comes to me and asks to be covered, I will be willing to consider it” (Altmeyer 1966, 103).

In other words, the available evidence suggests that Southern agricultural producers wanted their employees excluded from coverage because they did not want to be taxed to support the Social Security system. Indeed, the evidence suggests that they did not want to pay the requisite taxes for any of their workers—white or black—or for themselves, for that matter.

Unfortunately, there is no direct evidence on the attitudes of farm workers regarding their exclusion from coverage. All that can be said with certainty is that coverage under Social Security was not universally perceived as a boon by the workers and employers of the 1930s.

Once the law was passed, one of the major administrative struggles undertaken by the Social Security Board in the early years of the system was the effort to get covered workers and employers to participate—that is, to accept the fact that they were covered. Until the mid-1940s—when benefits were finally flowing in noticeable volume—many workers and employers in all occupational categories tried to avoid coverage. Indeed, the Social Security Board had full-time positions in its field offices called field representatives, and one of their main functions was to go out into the community and find noncompliant workers and employers and convince them that they had to accept the fact that they were covered by the law.

We can gain some insight into the attitudes of domestic workers and their employers by observing what occurred after 1950, when domestic work was

brought into coverage.¹⁶ There is quite a bit of evidence of resistance from employees and employers alike. One St. Louis housewife told the *Wall St. Journal*, “I haven’t paid the tax so far, and I’m not going to pay it until someone yells.”¹⁷ A Pittsburgh woman told the *Journal*, “I’ve never given it any thought, and I don’t suppose my cleaning girl has either; she’s never mentioned it.”¹⁸ According to the *Journal’s* investigation of the issue, “Many domestic servants queried about the new Social Security provisions said they definitely would object to the withholding from their pay. Some simply don’t want to lose the 2% in cash wages.”¹⁹

One group of domestic-employing housewives in Marshall, Texas formed a rump resistance to coverage, initiating a lobbying campaign and a federal lawsuit against coverage of their employees—a lawsuit they pursued all the way to the U.S. Supreme Court, but lost in January 1954.²⁰ Ironically, the housewives’ rebellion became a political cause championed by the leading newspaper of the area—the *Houston Post*—whose publisher, Oveta Culp Hobby, would become Eisenhower’s secretary of Health, Education, and Welfare in 1953 and would thus be the federal official charged with responsibility for administering the Social Security Act.

Over the years, domestic workers often tried to avoid coverage, usually by persuading their employers to pay them “under the table” so that there was no record of their earnings. This would mean, of course, that they would not be eligible for benefits in the future.

We saw evidence of this attitude on the part of these lower-paid workers when the issue of coverage for domestic workers broke into public attention in 1993 with the failed nomination of Zoe Baird to be U.S. attorney general. Baird had been paying her domestic help “under the table” for years, at the request of her employee. At the time the Zoe Baird case broke into public view, officials of the Internal Revenue Service estimated that only about 500,000 of the “several million” who employed domestic workers were in fact complying with the coverage requirements of the 1950 law.²¹ What these incidents all reveal is that even now, domestic workers resist being covered by Social Security, and it suggests that they would not in fact have agreed in 1935 that the decision to exclude them was adverse.

Contemporary scholars tend to look back on 1935 from their present vantage points, and they see something of value (Social Security coverage) being

withheld from African Americans. But this distorts the historical context in which the coverage decisions were actually made. There is good reason to believe that many agricultural and domestic workers in 1935 may not have agreed that something of value was being denied them.

Also, the race critique misrepresents the factual history of the exclusions, how they developed, and what the evidence of record says about the decision to exclude farm and domestic laborers from coverage.

The Legislative History of the Coverage Exclusions

The Roosevelt administration’s Social Security proposals were developed by an executive branch ad hoc Committee on Economic Security, headed by Secretary of Labor Frances Perkins, which was comprised of five cabinet-level administration officials.²² The CES was supported by a four-part organization: At the top was the executive director (Professor Edwin Witte of the University of Wisconsin); under Witte was a technical board (headed by Arthur J. Altmeyer), which contained several dozen volunteer staffers on loan from federal agencies; and finally, within the CES, there was a cadre of subject-matter experts who were recruited from academia and related entities. From outside the CES, there was also an advisory council composed of representatives from business, academia, and interest groups. All of these individuals and groups had input in the CES’s decisions.

The subject-matter experts within the CES were divided into “working groups” by topical area. The group developing the Social Security proposals (who made the initial program-design decisions) was known as the Old-Age Security Staff and was composed of three experts: Barbara Nachtrieb Armstrong, associate professor of law, University of California; J. Douglas Brown, director of the Industrial Relations Section, Princeton University; and Murray W. Latimer, chairman of the Railroad Retirement Board. Working for these three experts were numerous researchers and assistants who prepared literally dozens of background papers for the staff’s consideration.

Thus, any decision on Social Security policy, such as coverage recommendations, went through the following six-step decision process.

1. Staff recommendations were made initially by the Old-Age Security Staff.
2. The advisory council offered its recommendations to the technical board.

3. The Old-Age Security Staff and the advisory council recommendations were subject to a review by Altmeyer and the executive staff of the technical board.
4. The recommendations were then subject to a review by Witte.
5. The CES itself then made the final decision as to its recommendations.
6. President Roosevelt reviewed the CES recommendations and made the final policy decisions that would be in the administration's legislative package.

The Old-Age Security Staff recommended four broad exclusions from coverage: white-collar workers earning more than \$50 per week, government employees, railroad workers, and agricultural and domestic workers. The rationale given by Armstrong, Brown, and Latimer for excluding farm and domestic workers were reasons of administrative efficiency.²³ The matter was described in the Social Security Board's (1937) book, *Social Security in America* (which was a summary report of the CES work):

Administrative difficulties suggested further limitations of coverage to eliminate, at least in the early years of a system, certain types of employments in which it would be difficult to enforce the collection of contributions. In the case of farm labor and domestic servants in private homes, a large number of individual workers are employed in small establishments scattered over a wide area, frequently at some distance from any city or town. The close relationship which exists between employer and employee, the frequent absence of accounting records, and the usual provision of a part of compensation in the form of maintenance would greatly handicap effective enforcement. While the need of these groups for protection in old age was very apparent, it seemed expedient to postpone their inclusion until after administrative experience could develop in less difficult areas of operation. (208)

The recommendation of the advisory council was a slight variation on that of the CES staff. The council suggested four exclusions: white-collar workers earning more than \$100 per week, government employees, railroad employees, and agricultural workers. The council's rationale for excluding agricultural workers

was the same as that of the CES staff—administrative difficulties.

Altmeyer and Witte supported the recommendations of the CES staff, including the exclusion of agricultural and domestic workers. This was the proposal submitted to the CES. At the CES, both Frances Perkins and Harry Hopkins objected to the exclusion of farm and domestic workers, arguing that the program should be as nearly universal as possible. As a consequence, the final report from the CES to President Roosevelt dropped the exclusion of agricultural and domestic workers and moved toward a higher dollar amount for white-collar workers, as advocated by the advisory council. In the end, the CES's final report contained three recommendations for exclusions: white-collar workers earning more than \$250 per month, government employees, and railroad workers.²⁴

Alston and Ferrie (1999, 62–66) have added some confusion to accounts of the initial decision making by the CES by reading too much importance into some of the background papers produced by the research staff, who generally wrote more favorably of the possibility of including agricultural workers (although not domestic workers). The authors incorrectly reported that the CES staff recommended universal coverage. In fact, the Old-Age Security Staff, the advisory council, Altmeyer and the technical board, and Witte all made the contrary recommendation.

Alston and Ferrie (1999, 66) also incorrectly stated that the draft administration bill included “a special scheme to cover ‘farm owners and tenants, self-employed persons, and other people of small incomes.’” They then argued that when this “special scheme” was dropped during congressional consideration of the bill, this was evidence of a congressional influence on the coverage exclusion of agricultural workers. As Alston and Ferrie put it: “The special Old-Age Insurance program for tenants, croppers, and farm owners was similarly deleted without much ceremony by the committees” (68).

The special scheme referred to was in fact a proposal for a supplemental system of voluntary annuities to be sold in the marketplace by the Treasury Department, as an adjunct to the compulsory old-age insurance pensions. It had two aims, according to Witte's testimony and the CES's final report: (1) to supplement the pensions of those covered by the compulsory system, and (2) to permit those not covered to purchase marketplace annuities to provide for their own retirement security. This was not a proposal to create

a “special” coverage rule for agricultural workers. Essentially anyone in America would have been able to purchase the market-based annuities—rich, poor, and middling alike—regardless of their occupations and regardless of whether or not they already were covered under the program.

The quotation Alston and Ferrie (1999) provided—referring to “farm owners and tenants, self-employed persons, and other people of small incomes”—was in fact a comment made by Edwin Witte during his testimony as part of a suggestion that Congress study the possibility of providing subsidies to low-income individuals to help them purchase these voluntary annuities (Economic Security Act 1935a, 46–47).²⁵ It was not itself a “program” of any kind, and it had nothing to do with providing Social Security coverage to anyone. As it happened, the recommendation was rendered moot since Congress refused to adopt the voluntary annuity scheme. It was not, however, “deleted without much ceremony by the committees.” Actually, it was dropped in the House by a unanimous vote within the Ways and Means Committee (as part of a larger political maneuver involving other provisions of the bill), approved by a 7 to 5 vote in the Finance Committee, and finally disposed of in the Senate by a motion proffered on the Senate floor by Senator Augustine Lonergan of Connecticut, on behalf of his state’s insurance interests—eager to keep the federal government out of the annuity business.²⁶

After the CES’s final report went to the president, he reviewed it with some care, even forcing the CES to rewrite the financing provisions to make the program more clearly self-supporting (Witte 1962, 74).²⁷ But he accepted the recommendations on coverage. Therefore, the report from the president to the Congress on January 17, 1935, and the associated draft administration bill included coverage for farm and domestic workers and contained only the three other exclusions recommended by the CES.²⁸ This was in keeping with the final recommendation of the CES, as signed-off on unanimously by all five members, including Secretary of the Treasury Henry Morgenthau, Jr.

Because the president had at the last minute pulled the actuarial tables from the CES document, the proposal went to Congress without benefit of the supporting financials, and Secretary Morgenthau had to appear during the House hearings on the bill to present the revised financing scheme. He did so during testimony on February 5, 1935. At the hearing, Morgenthau presented a set of revised financial estimates and asked the Ways and Means Committee to substitute

these actuarial tables for the missing data in the original report. However, he also took the opportunity to do something quite unexpected. During his testimony he complained to the Ways and Means Committee that the idea of virtually universal coverage of all workers in the country would impose an intolerable administrative burden on the Treasury Department (which would have responsibility to collect the taxes at a time well before automatic payroll deductions or computers). He thus suggested to the committee and to a startled Frances Perkins, who was present at the hearing, that coverage be dropped for certain groups of workers who would present tax-collection problems for the Treasury. He specifically recommended dropping “casual laborers,” “domestic servants,” and “agricultural workers.” As Frances Perkins (1946) recalled the event:

He argued that it would be a difficult problem to collect payments from scattered farm and domestic workers, often one to a household or farm, and from the large numbers of employees working in establishments with only a few employees. He begged to recommend that farm laborers, domestic servants, and establishments employing less than ten people be omitted from the coverage of the act. . . . The Ways and Means Committee members, impressed by the size of the project and the amount of money involved, nodded their heads to Secretary Morgenthau’s proposal of limitation. There was nothing for me to do but accept. (297–298)

Morgenthau’s testimony was quite specific as to his motives and will be considered in some detail here.²⁹ Morgenthau began by interrupting his own testimony to alert the committee that he was about to make a “personal” statement, representing the views only of the Treasury Department and not the president or the CES. He told the committee that the Bureau of Internal Revenue (which reported to him) had presented him with a report indicating that they had serious concerns about the coverage provisions and he felt duty-bound to support them. Morgenthau told the committee: “I simply feel that this is a matter [of] the responsibility . . . which will fall on the Bureau of Internal Revenue. They raised the point as to whether they can enforce this.” Congressman Treadway (R-MA) interrupted Morgenthau at this point to clarify Morgenthau’s own views as distinct from those of the Bureau of Internal Revenue. He asked Morgenthau, “I assume that you concur with the

Bureau of Internal Revenue on this point?” “Oh yes,” Morgenthau replied. To make sure, Treadway asked again, “You approve what they are recommending for you to submit to the committee?” “Yes,” Morgenthau insisted, “Otherwise I would not read it.”³⁰ Morgenthau then turned to his specific arguments for restrictions on coverage:

[T]he bill in its present form imposes a burden upon the Treasury that it cannot guarantee adequately to meet. The national contributory old-age annuity system, as now proposed, . . . means that every transient or casual laborer is included, that every domestic servant is covered, and that the large and shifting class of agricultural workers is covered. Now, even without the inclusion of these three classes of workers, the task of the Treasury in administering the contributory tax collections would be extremely formidable. If these three classes of workers are to be included, however, the task may prove insuperable—certainly, at the outset.³¹

At the very end of Morgenthau’s testimony he made another argument for delaying coverage—an argument that turned out to be prescient. He worried, he told the committee, that difficulties in enforcement would create incentives for these groups to become scofflaws, evading their taxes and thereby undermining the Treasury’s mission. This is precisely what happened in the case of domestic workers.

Alston and Ferrie (1999, 67–69) depicted Morgenthau as only lukewarmly interested in the exclusion of agricultural and domestic workers and as being stampered to this view by Vinson and other Southerners on the Ways and Means Committee. The authors made a particular point of claiming that “Morgenthau found several other options equally satisfying, including bringing agricultural workers under the bill immediately and dealing later with the peculiar problems their inclusion might pose.”

From the extensive quotations offered here, it should be clear that the Alston and Ferrie interpretation is inconsistent with the record. And the specific claim that Morgenthau abandoned the coverage exclusion position in favor of some more “ideal” option is based on a single passing remark, which comes literally as the last sentence in Morgenthau’s 15 pages of testimony and as part of a jumbled discussion among Morgenthau, John McCormack (D-MA), Arthur Altmeyer, and Fred Vinson (D-KY).³² What Morgenthau responded favorably to was a fleeting suggestion that

these categories of workers could somehow be covered “in principle” immediately, but not in practice until sometime later when the administrative problems had been solved. It is beyond reasonable doubt that Morgenthau strongly recommended excluding agricultural and domestic workers in the initial years of the Social Security system, on grounds of the administrative difficulties that he believed their inclusion would present the Bureau of Internal Revenue in its tax-collection process under the law.

No Southern member of the Ways and Means Committee spoke out either in favor of or against Morgenthau’s proposal during his hearing testimony. In fact, the only member who took a position on either side of the issue was John McCormack (D-MA), who worried and went on to explain, “if we do not get them in the bill, then you are going to have a lot of difficulty in the future getting them into the bill.”³³

Apart from Morgenthau’s surprise testimony, the topic of the exclusions was raised on only a handful of other occasions during the hearings. It was first broached by Edwin Witte in a dialog with Fred Vinson. Witte raised the issue of coverage of domestic workers in the context of the administrative difficulties in general and how taxes might be collected. He mentioned the stamp-book system in use in Britain and used domestic workers as an example of a group for whom tax collection was difficult. An exchange followed in which Vinson asked Witte if the issue about potential administrative difficulties applied to agricultural and casual laborers, as well as domestic workers. Witte conceded that it did. The context in which they discussed all three categories, however, mostly involved program costs. Vinson was apparently worried about loss of revenues from excluding these groups, although Witte apparently misunderstood his point, and they talked past each other for most of their dialog. Vinson clearly initiated the topic of excluding these categories of workers, and his colloquy with Witte did occur prior to Morgenthau’s appearance before the committee. This was the sole instance in the hearings in which any member of either committee (Southerner or otherwise) discussed the topic. Vinson specifically asked Witte to give the committee assurances that excluding these groups would not have any adverse financial impact. Witte assured him that the financial impact would be minimal, and that was that (Economic Security Act 1935a, 112–113).

In Witte’s Senate testimony, he and Finance Committee Chairman Harrison had a brief dialog concerning the exclusion of agricultural workers. Harrison

broached the topic, whose comments on the exclusion of agricultural workers consisted of a one-sentence question to Witte asking whether the CES had given any thought to excluding agricultural workers; he then asked Witte a few follow-up questions as to who had represented the agricultural perspective within the CES structure (Economic Security Act 1935b, 219–220). In his testimony before both the House and Senate, Marion Folsom, representing the Advisory Council on Social Security, briefly mentioned its support for the recommendation to exclude agricultural workers (and now domestic workers too) on grounds of administrative difficulty. Folsom’s testimony in both committees occurred after Morgenthau’s, so the Morgenthau proposals were already on the table, and Folsom stated that the advisory council supported them. In the House, no member of the committee made any comments on Folsom’s testimony on the issue.

In the Senate Finance Committee, Folsom also testified on the issue. After a long discussion about the financing of the contributory system and especially about the prospects for a large trust fund reserve—which was in fact the main topic of interest among all parties throughout the hearings when it came to the Social Security program—Folsom volunteered, “I agree that agricultural workers and domestic service should come out. Our advisory council recommended that it [sic] be excluded also. The Cabinet committee plan included them, but we think they should be excluded. Eventually they might be brought in, but right now we would cut them out” (Economic Security Act 1935b, 576–577). Chairman Harrison and Folsom then had a brief dialog on the issue.

Harrison: “Do I understand you to say that the tax should not be imposed on the employer in agriculture?”

Folsom: “They would not be eligible at all.”

Harrison: “How about the fellow when he got to be 65 years of age, who had been engaged in agriculture? Would he have to depend on the pension?”

Folsom: “On the old-age assistance.”³⁴

Harrison’s apparent interest here was in worrying about the loss of benefits to agricultural proprietors and workers if they were not covered by the program—not in keeping African Americans, or anyone else, *out* of the program.

In his testimony before the two committees, J. Douglas Brown repeated the CES Old-Age Security Staff recommendation that agricultural and domestic

workers be excluded on grounds of administrative difficulty, and no members engaged him in comment on the point.

U.S. Chamber of Commerce President Henry Harriman, in his testimony before the Senate Finance Committee, also advocated the exclusion of “agricultural workers, domestic servants, and casuals” on grounds of administrative difficulty. Harriman told the committee, “I should think that it would be, as a practical matter, practically impossible to collect the tax on, for instance, the casual worker—the man who comes and works in your garden for a day or two, or he shovels snow. I think the burden of setting up an organization to collect such taxes would be substantially impossible; and I believe that, certainly at the start, it would be very much better to remove those three classes.”³⁵

The exclusion of farm and domestic labor because of the administrative difficulties involved in tax collection was supported by political activist Abraham Epstein, who generally criticized the Social Security program from the political left, complaining it was not generous and comprehensive enough. Epstein testified before both the House and the Senate committees and made the most sustained argument of anyone in support of excluding farm, domestic, and casual workers on the grounds of administrative difficulty. Epstein was worried that if the new program foundered over administrative glitches, support would be undermined for the liberalizations he wanted to see down the road.³⁶ During Epstein’s House testimony, Rep. Frank Buck (D-CA) asked if he also advocated excluding agricultural workers, at which point Epstein replied that he did. Fred Vinson asked if he was also advocating excluding casual laborers, and Epstein replied that he was. During Epstein’s long Senate testimony, no member commented on his recommendations for excluding agricultural and domestic workers.

The only witness in the hearings to speak out against the exclusion provision was NAACP official Charles Houston. Houston pointed out the adverse impact of the provision upon African Americans, as part of an overall critique designed to persuade the Congress to *drop the whole Social Security program entirely*. He wanted a single, universal, federal welfare benefit in lieu of a contributory social insurance system. Houston conceded Morgenthau’s point about administrative difficulty, telling the Finance Committee, “No argument is necessary to demonstrate that the overhead of administering and really enforcing a pay roll tax on casual, domestic and agricultural

workers would practically consume the tax itself.”³⁷ So Houston was not advocating coverage for domestic and farm workers, but rather rendering the whole issue moot by rejecting the Social Security system *entirely*.

Lieberman (1998, 43) made much of Ways and Means Chairman Robert Doughton’s (D-NC) supposed disengagement and lack of comment during the hearings on the bill. He depicted Doughton as sitting silently through much of the witness testimony. Lieberman then suggested that Doughton, and Harrison in the Senate, only displayed an active interest in the specifics of the hearings when topics like the coverage exclusions were raised—suggesting, for Lieberman, a more active involvement on the part of the two chairmen in shaping the issue.

Lieberman’s characterization of the two chairmen is problematic. For example, during the House hearings, we can find Doughton carrying on colloquies with witnesses on a variety of subjects, including the qualifications of members of the advisory council; under what conditions dependent parents might be eligible for aid under state welfare programs if their adult children fail to support them; the Townsend Plan; cost estimates for the old-age pensions; the staffing, compensation, and organizational placement of the Public Health Service; the tax rates under Unemployment Insurance; and other topics, as well as defending against Republican criticisms of administration testimony.

In the case of Harrison, Lieberman (1998, 43) cited Witte’s Senate testimony as an example of the disengagement he perceived in the hearing testimony. Because this kind of impressionistic argument is subjective, it might be illuminating to perform a simple empirical test. If we count the number of instances of comment by Chairman Harrison during Witte’s testimony, we will discover that he commented 180 separate times, of which precisely 12 involved the topic of the exclusion of agricultural workers.³⁸ This is hardly indicative of an obsessive focus on the exclusion of agricultural workers.

Although I think Lieberman’s characterization of the involvement of both chairmen is debatable, his observations overlook the specifics of Doughton as an individual. For one thing, Doughton was already 72 years old by the time of the Social Security hearings, and he was hard of hearing, which may explain some of his “disengagement” during the testimony. Arthur Altmeyer (1966, 100) observed one of his experiences with the testimony before Doughton’s committee: “There was no microphone, and the

acoustics of the room were such as to make even a shout almost inaudible. Moreover, Robert L. Doughton, the Chairman, was very deaf and disdained the use of a hearing aid. I can never forget how the elderly Chairman would say, ‘Speak up, young man, speak up,’ although I was shouting at the top of my voice at the time.” Morgenthau privately made a similar observation, telling his staff on one occasion that when they presented an excess-profits tax proposal to Doughton, “we will have to shout it four times” (Swain 1978, 228). Also, according to Altmeyer (1966, 30), Doughton was reticent to speak up on subjects on which he was uncertain and would typically let other members take the lead in the questioning during hearings; the administration’s economic security bill was very much in this category.

During the House floor debate, Fred Vinson, David Lewis, John McCormack, and Jere Cooper (D-TN) voiced the administrative-difficulty argument in support of the exclusions. When a Republican member challenged McCormack over the idea of excluding domestic workers, Vinson voluntarily responded, “The tax levy in title VIII is upon wages. Taking as a basis the total wage of the domestic servants . . . you would not have money in the account sufficient to purchase a substantial annuity. You would have a nuisance feature, such as a person being paid [a] \$1 wage and taking out 1 penny and having at the end of the road a small sum that would purchase a very small annuity. The same thing applies to agriculture, and the same thing applies to other occupations.”³⁹ This reinforces the reading of the hearing testimony, which suggests that even Vinson was primarily interested in financing issues, not the racial makeup of the excluded groups.

Daniel Reed (R-NY) voiced the only opposition to the coverage exclusions. Reed was an opponent of the entire 1935 act, and he voted against it as unconstitutional and as “an invasion by the Federal Government.” In an effort to have the whole Federal Old-Age Benefits program dropped, he made this argument: “You propose to whip and lash the wage earner into paying this tax, but you are not treating everybody alike. Millions who labor will be exempted from benefits. [Referring to the exclusion of domestic and farm labor] . . . why talk about the difficulty of administering the act as a justification to exclude them? You found no difficulty in providing for administration of title I of the act . . . but when it comes to certain classes you discriminate. This title ought to be removed from the bill.”⁴⁰ In other words, it was not fair that the bill failed to whip and lash farm and domestic workers like

everyone else, so the whole Social Security program should be dropped on grounds of equity.

In responding to Reed, McCormack explained the rationale for the differential treatment between the Title I and Title II laws:

Title I is a noncontributory law. Title II is a contributory law. Title I, being noncontributory, every person in need ... without regard to their previous employment, should receive the amount set out, provided and intended by this bill.

When we come to the contributory provision, there is an entirely different situation. The administrative cost enters into the picture. Furthermore, whether or not farm laborers and domestic servants receive a salary so that when they reach the retirement age they will receive an earned annuity about \$10 a month [the minimum in the law] is also a matter of consideration. We have also excluded those employed in educational and religious activities and in all kinds of charitable activities. The committee has tried to draft a contributory annuity provision which not only [meets] the purposes desired but [does] so in a manner that can be administered without any great difficulty.⁴¹

No mention of excluding agricultural and domestic workers occurred during the Senate debate.

So the only real attention given to the issue of the exclusions by any member of Congress, North or South, was from Fred Vinson, the first to mention the administrative difficulties associated with agricultural and casual labor; and Senator Pat Harrison, who fleetingly raised the matter of agricultural workers with Edwin Witte.

Also to clarify what the policy decision really was here—Morgenthau, Epstein, Brown, Folsom, and Harriman were not, as their testimony made clear, urging the *exclusion* of agricultural and domestic workers from the system, but only a *delay in their inclusion*. Indeed, as events transpired, almost all agricultural and domestic workers would be included by 1950 and the remainder by 1954. The real aim of the proponents of the exclusion was not to exclude agricultural and domestic workers, but to include them later. The difference matters. We cannot impute racism to the Social Security program on the assumption that this provision was designed to exclude from coverage African Americans if in fact exclusion was

not the purpose. If delay in covering workers in these occupational categories was the purpose, this lends credence to the view that the provision was motivated by administrative practicality and not racism.

Administrative Difficulties Reconsidered

Some scholars have argued that there were no genuine administrative difficulties involved in extending coverage to agricultural and domestic workers in 1935, and thus their exclusion from the 1935 act could not have been on this basis.

Finegold (1988, 209), for example, said of the administrative-difficulties argument, “Opponents of extending contributory social insurance stressed its administrative difficulties, but their arguments should not be taken at face value: they showed little interest in exploring ways to address the practical problems, as had already been done in other countries, and would eventually be done rather easily in the United States.”

Lieberman (1998 41–42, 96–98) made much of the idea of a stamp-book system for recording earnings. He noted that Witte mentioned it (albeit in an ambiguous way); that J. Douglas Brown testified at length in favor of it; that there was precedent for it in some European systems (the system in use in Great Britain being specifically touted); and that during consideration of the 1939 amendments, the Social Security Board produced briefing papers suggesting it could be used to overcome the administrative difficulties involved here.⁴² Many other scholars mentioned the stamp-book system, counter-example to undermine the administrative-difficulties argument.⁴³

Lieberman reported that the stamp-book idea was dropped by the Ways and Means Committee, suggesting again the influence of Southern congressmen.⁴⁴ Actually, the stamp-book idea was not dropped by Ways and Means; it remained in the final enacted version of the law, under section 807, as an option left open to the program’s administrators. It was the Treasury Department that dropped the idea of a stamp-book system—in 1936, in a letter to the Social Security Board⁴⁵—because that agency was still convinced it was not a practical method of addressing their administrative problems, and it was the judgment of the Treasury Department that was the driver behind the whole sequence of legislative policymaking.

Contrary to Finegold’s assumption, the matter of administrative options (and especially the stamp-book scheme) was explored in detail both by the CES and the Social Security Board. And contrary to

Lieberman's report, the Social Security Board's internal studies around the time of the 1939 amendments often concluded that the stamp-book scheme was unworkable—despite the board's stated policy objective of extending coverage. One summary study of the issue listed five advantages of the stamp-book system, along with twice as many disadvantages.⁴⁶

But of course a study from 1939 speaks only indirectly to policy decisions made in 1935. The pertinent study on this question was the one prepared by the CES researchers in 1934. Their main report on the issue, *The Case for Payroll Recording as Against the Stamp System*, was presented to the technical board on October 16, 1934, by CES staffer Merrill G. Murray.⁴⁷ Not only did Murray tell the technical board that the stamp-book scheme had insurmountable problems—such as being too complicated; incapable of dealing adequately with part-time employment; less capable of yielding useful program statistics; more difficult to coordinate with other social insurance measures; and more prone to fraud—he also attached a special addendum in which he detailed the fraud and other well-known abuses that afflicted the British stamp-book system. This report by Murray and the internal study by the Treasury staff constituted the available information the CES had and used in making their decisions about the stamp-book system during the 1934–1935 period, no matter what the Social Security Board may have believed in 1939.⁴⁸

Because the idea of a stamp-book system is used so widely to discredit the administrative-difficulties thesis of the coverage exclusions, it might be useful to explore in a little more detail just why the staffs of the Treasury Department and the CES considered it unworkable. Consider just two of the many problems with the stamp-book scheme.

First, under the U.S. system adopted in 1935, employers made their tax payments quarterly, based on the actual wages paid during the preceding quarter. Under a stamp-book system, employers would be required to prepay their taxes by purchasing stamps equal in value to their expected tax burden in the ensuing pay period. Also, under a stamp-book system, purchase of the stamps by the employer is the method of tax payment; this is how the tax-collection problems for Treasury are overcome. Prepayment of taxes is required, and the employer must paste stamps in the workers' stamp books whenever earnings are paid; this is how earnings are certified so that the worker may eventually qualify for a benefit. Employers have to purchase stamps at the beginning of each pay

period—weekly, biweekly, monthly, or whatever the pay periods may be for their employees—sufficient to cover the upcoming payroll. Thus, the administrative burdens of tax collection and earnings certification are shifted from the Treasury Department to the nation's employers. This is something many employers would most likely find highly objectionable.

Second, under the U.S. system, the government goes to the effort and expense to maintain the earnings histories of every covered worker for the duration of their working lives. Then when they retire and file a claim, the workers have no burden to establish their earnings history; they only need to prove that they are of retirement age. Under a stamp-book system, the entire burden shifts either to the worker or the employer, who must maintain and preserve the stamp books until they can be turned over to the Social Security Board. If the stamp books are lost, damaged, or destroyed, the worker has no certified record of earnings to use in establishing entitlement to a benefit. Shifting the burden of proof in this way would almost certainly have created enormous administrative difficulties, not for the government, but for millions of workers and employers. For these and other reasons, the stamp-book scheme was one never likely to be enacted into law.

It should be noted that the administrative challenges were in fact still formidable nearly 20 years later when all agricultural and domestic workers were finally covered by amendments enacted in 1950 and 1954. The top administrator at the time, Robert M. Ball, described extending coverage to agricultural workers as “one of the toughest things that Social Security ever undertook,” and he has given a fairly detailed account of some of the administrative difficulties the government faced when coverage became available.⁴⁹ Also, it is interesting to note that during the 1950s, the Social Security Administration had to more than double its staff—from 12,000 to 25,000—in order to cope with the challenges of the expansions in coverage.⁵⁰

Conclusions

It was the surprise testimony of Henry Morgenthau, Jr., rather than any initiative by any member of Congress, that was the source of the decision to exclude farm and domestic workers from coverage. It was not presumptively racist Southern politicians who moved to delete coverage for these workers, but northeastern patrician Henry Morgenthau, Jr., who was trying to avoid an onerous task for the Treasury.⁵¹ Congress was only too happy to oblige Secretary Morgenthau by excluding

several million workers and their employers from the burden of paying those taxes.

It is more in keeping with the evidence of record to conclude that the members of Congress (of both parties and all regions) supported these exclusions because they saw an opportunity to lessen the political risks to themselves by not imposing new taxes on their constituents.

It is not as if observers of these events were oblivious to the issue of race as it influenced particular provisions of law. As we saw, Witte recounted how race was a factor in the development of Title I of the 1935 act. Another contemporary observer, Paul Douglas (1936, 100–102), also pointed an accusing finger at Southern Democrats in Congress when it came to the Title I program.⁵² Yet neither Witte nor Douglas reported any such influence on the Title II program coverage issue. Nor did other eyewitnesses—such as Arthur Altmeyer, Frances Perkins, or Thomas Eliot—mention any such influence in their memoirs (Eliot 1992).⁵³

The actual historical sequence of coverage exclusion follows.

- The Old-Age Security Staff, the Advisory Council on Social Security, Arthur Altmeyer and the technical board, and Edwin Witte all recommended excluding agricultural and/or domestic workers on the grounds of administrative simplicity.
- The CES overruled them and included such workers.
- President Roosevelt supported agricultural and domestic worker coverage.
- Little notice or mention of the issue appeared in the Congress before Henry Morgenthau, Jr., urged the House Ways and Means Committee to adopt the exclusion.
- Little notice or mention of the issue occurred in the Congress after Morgenthau's testimony.
- The exclusion was adopted without any reported debate by Ways and Means, acceded to in the Senate Finance Committee, and adopted in both chambers without real debate and only passing mention.
- At no point did Southern Democrats create the exclusion or push it through Congress.

The overwhelming bulk of the evidence here suggests that it was bureaucratic actors who were the effective parties in shaping and moving this policy.

This was preeminently a policy promulgated by the bureaucracy to satisfy its own administrative needs.

The allegations of racial bias in the founding of the Social Security program, based on the coverage exclusions, do not hold up under detailed scrutiny.

Notes

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¹ Gordon and Paterson's (1999) underlying source document is an excerpt from Witte's (1962) memoir under a different title, "An Architect of Social Security Recalls the Southern Concession."

² This is especially true of the Gordon and Paterson (1999) analysis cited earlier. The authors clearly confused the title I welfare provisions of the 1935 act with the title II social insurance provisions.

³ The other titles were financing and administrative titles in support of these seven programs.

⁴ One could make an indirect argument here, as Linda Gordon (1994, 275) did, that receipt of a retirement benefit by an elderly family member might allow younger dependents to quit work thereby depriving Southern economic interests of some fraction of their labor pool. Even here, retirement benefits are still paid after years of contributions and work—they are not an immediate threat to anyone's economic arrangements.

⁵ The full original quote can be found in Witte (1962, 143–145).

⁶ See Table 1 of this article for data on the number of gainfully employed African Americans, and see Social Security Board (1937, Table I-2, 387) for the estimates of the number of gainfully employed workers excluded from the program. The 15 million figure is derived by assuming that virtually 100 percent of the 5.5 million gainfully employed African Americans were excluded from the program. This is of course not true. But it does indicate

the absolute minimum floor of the proportion of excluded workers who must have been white.

⁷ Early in his presidency, Franklin Roosevelt assembled a group of African American leaders to serve as his advisers on matters of race. This group—known as the Federal Council on Negro Affairs—was composed of prominent black leaders, most from various nonprofit organizations. Some council members—such as Mary Mcleod Bethune—also held positions in the federal government.

⁸ One might also think that the data show evidence of a bias against persons of color more generally. But this seems even more implausible, as it would require that the members of Congress in 1935 held some sort of animus toward Mexicans, Indians, Chinese, Japanese, Filipinos, Hindus, Koreans, Hawaiians, and so forth, and that they were also aware of which occupational categories typically included those various racial groups. Also, the racial-bias thesis has an initial plausibility only because some Southern members of Congress in 1935 can be assumed to harbor racial bias against African Americans. But who comprises the group of congressmen we can presume to be prejudiced against those other racial groups? And can we demonstrate that this particular group of congressmen were in a position to influence the shape of the legislation? This is illustrative of why one cannot look at the data shown in Table 1 of this article and simply conclude that it demonstrates racial bias. The more straightforward explanation is that these occupational groups were excluded from coverage because of characteristics of the occupations themselves, not the race of the workers.

⁹ Interestingly, as part of the 1939 amendments, Congress made an attempt to define “agricultural employment” for Social Security purposes and in the process reversed some of the early Treasury decisions. The net effect of the 1939 amendments was to exclude an additional 550,000 to 850,000 agricultural workers from participation in the program.

¹⁰ See also, Safier, Quinn, and Fitzgerald (1941, 11–14) and Safier, Unseem, and Quinn (1943, 18–24).

Note, however, that the opportunity to earn some coverage does not mean that all of these workers would earn sufficient coverage to be insured for an eventual benefit—in fact the board’s studies suggest most would not.

¹¹ Some scholars are more thoughtful on this point than others. Lieberman indicated that he appreciates the limitations of this generalizing about the South, but then he proceeded to over-generalize on the coverage issue anyway.

¹² David Lewis was chosen by the Roosevelt administration to introduce their bill in the House because he was viewed as the leading subject-matter expert on the Ways and Means Committee, owing to his work on other liberal reform legislation, often in concert with Senator Robert Wagner of New York. What happened is that Lewis introduced the bill and then Chairman Doughton, feeling his

prerogatives abused, forced the clerk of the House to alter the record to show that Doughton had submitted the bill earlier than Lewis, and hence, Doughton was listed as the official sponsor of the bill.

¹³ For the text of the three U.S. Supreme Court cases and a brief narrative introduction to the issues involved in the question of the act’s constitutionality, see my essay “The 1937 Supreme Court Rulings on the Social Security Act,” available at <http://www.socialsecurity.gov/history/court.html>.

¹⁴ I have previously published a brief research note on the legislative history of the Clark Amendments. This note is available at <http://www.socialsecurity.gov/history/clarkamend.html>.

¹⁵ Arthur J. Altmeyer, Interview #4, with Peter A. Corning, June 29, 1967, available at <http://www.socialsecurity.gov/history/ajaora14.html>.

¹⁶ The 1950 law extended coverage to farm and domestic workers regularly employed by a single employer, but not to farmers themselves or farm labor or domestic servants who worked for multiple employers. These latter groups were brought under coverage in 1954. So it was 1954 before all agricultural and domestic workers were covered under the Social Security Act.

¹⁷ “Household Help: Social Security Tax Adds New Complication in Hiring Home Help,” *Wall St. Journal*, March 22, 1955, 1.

¹⁸ *Ibid.*

¹⁹ *Ibid.*

²⁰ “Housewife Loses Long Tax ‘Revolt,’” *New York Times*, January 5, 1954, 15.

²¹ “Overhaul Set for Domestic-Help Rules,” *New York Times*, March 5, 1993, A10.

²² The five CES members were: Frances Perkins, secretary of labor and CES chairwoman; Henry Morgenthau, Jr., secretary of the Treasury; Homer Cummings, attorney general; Henry A. Wallace, secretary of Agriculture; and Harry L. Hopkins, Federal Emergency Relief administrator. Strictly speaking, this was the CES, although the various staff groups in support of the CES are often spoken of as the CES as well, sometimes leading to confusion.

²³ The Old-Age Security Staff Report is available at <http://www.socialsecurity.gov/history/reports/ces/ces2armstaff.html>.

²⁴ The final report of the CES is available at <http://www.socialsecurity.gov/history/reports/ces/ces5.html>. Also some selections from the unpublished studies of the CES can be found at <http://www.socialsecurity.gov/history/reports/ces/ces10vol.html>.

²⁵ Available at <http://www.socialsecurity.gov/history/pdf/hr35report2.pdf>.

²⁶ I have given a more detailed account of the voluntary annuity plan and its fate in the Congress in a research note at <http://www.socialsecurity.gov/history/voluntaryannuities.html>. For the Senate floor debate, see the *Congressional Record*, 74th Congress, 1st Session, 10018-10023. For a third-party account, see Douglas (1936, 116).

²⁷ The president ordered a rewrite of the financing provisions because the initial proposal contained a long-range deficit that was to be covered by the use of general revenues. The president was opposed to the use of general revenue financing for the Social Security system. See DeWitt (2007) for a more detailed discussion on this matter.

²⁸ The full text of the administration's proposed bill can be found at <http://www.socialsecurity.gov/history/pdf/fdrbill.pdf>.

²⁹ "Statements of Henry Morgenthau Jr.," in *Economic Security Act (1935a, 897–912)*; Morgenthau's testimony can also be found at <http://www.socialsecurity.gov/history/35house.html>.

³⁰ *Ibid.*, 901.

³¹ *Ibid.*, 901–902. Morgenthau raising the issue of the "transient or casual laborer" is also the source of the provision in the 1935 act, which excluded "casual labor not in the course of the employer's trade or business."

³² "Statements of Henry Morgenthau Jr.," in *Economic Security Act (1935a)*. See in particular the last two pages of dialog beginning near the bottom of page 910 and running to the end of page 911.

³³ *Ibid.*, 911.

³⁴ *Ibid.*

³⁵ "Statement of Henry I. Harriman, President United States Chamber of Commerce," in *Economic Security Act (1935a, 915)*.

³⁶ "Statement of Abraham Epstein," in *Economic Security Act (1935a, 559–560, 571–572)*. "Statement of Abraham Epstein," in *Economic Security Act, Senate (1935b, 514–515)*.

³⁷ "Statement of Charles H. Huston," in *Economic Security Act, Senate (1935b, 644)*.

³⁸ This includes all of the chairman's comments—procedural as well as substantive—to provide a fully objective measure. My subjective parsing of this distinction reads Harrison as commenting on matters of substance on at least 150 of these occasions.

³⁹ *Congressional Record*, House of Representatives, April 18, 1935, 5992. Note that Vinson refers here to title VIII of the 1935 act. This was the title of the bill that mandated the taxes to be paid to provide the benefits available under the Title II program. The taxes were in a separate title of the bill from the coverage rules as a stratagem undertaken by the framers to try to protect the act from wholesale invalidation by the U.S. Supreme Court.

⁴⁰ *Ibid.*, 5991.

⁴¹ *Ibid.*, 5992.

⁴² Although J. Douglas Brown was pushing the stamp-book system, he was not suggesting this as a way of overcoming the problems associated with coverage of agricultural and domestic workers, but rather, as the system of tax collection for the covered categories. In fact, Brown was one of the three experts on the CES who crafted the original recommendation that excluded agricultural and domestic workers, and he persisted in this position notwithstanding his advocacy of the stamp-book system.

⁴³ For example, Linda Gordon (1994, 275 and endnote 96, 413) alluded to the stamp-book scheme to prove that the administrative-difficulties explanation was bogus. Gordon also suggested that Social Security could have been established with general tax-revenue funding rather than on a contributory basis—a doubtful proposition—but that allowed her to conclude that this imagined possibility somehow undermined the administrative-difficulties argument. Her argument appears to be that if contributions were not collected from workers or employers, then there would be no administrative difficulties involved in collecting taxes from them. This seems surely true, but of doubtful relevance.

⁴⁴ *Ibid.*, 42.

⁴⁵ Letter from Stephen B. Gibbons—acting secretary of the Treasury—to the Social Security Board, May 16, 1936. See also the board's reply letter, June 22, 1936; and the Treasury Department's acknowledgement of the board's reply in a letter, June 23, 1936. Copies of all three documents are available in the Social Security Administration's History Archives, revolving files, folder labeled "Stamp Book Plan For Reporting Agricultural & Domestic Workers."

⁴⁶ "Universal Stamp Book System," undated Social Security Board document, available in Social Security History Archives, revolving files, subject files: carrier #12, folder labeled "Stamp Book Plan For Reporting Agricultural & Domestic Workers."

⁴⁷ Available in Social Security History Archives, lateral file #3, drawer #2, folder labeled "CES Staff Paper—Folder 2."

⁴⁸ The idea of a stamp-book system did have a certain intuitive appeal. Social Security Board member Arthur Altmeyer thought it was a workable option, but John G. Winant, board chairman, was opposed to the idea and Altmeyer would later describe his advocacy of a stamp-book system as "naïve and wrong." See Altmeyer Oral History Interview #4, with Peter A. Corning, June 29, 1967, available at <http://www.socialsecurity.gov/history/ajaoral4.html>. In any case, the British abandoned their stamp-book system in 1944.

⁴⁹ Robert M. Ball, Oral History Interview #2, with Larry DeWitt, March 12, 2001, available at <http://www.socialsecurity.gov/history/orals/ball2.html>.

⁵⁰ *Annual Report of the Federal Security Agency, 1950*, 8 and the *Annual Report of the Department of Health, Education, and Welfare, 1960*, 23.

⁵¹ Or it could be said that Morgenthau was trying to get the Congress to recognize the administrative difficulties it sometimes imposes on the executive branch when it adopts public policies without sufficient consideration of their administrative impacts. Two excellent in-depth case studies of just this dynamic in operation as applied to the administration of Social Security programs can be found in Derthick (1990).

⁵² Douglas also made the quite pertinent observation that Southerners were not the only members of Congress amenable to racial motivations during this era—another reason that broad generalizations about “Southern influence” in New Deal policymaking are doubly suspect.

⁵³ Eliot was another close participant in the 1935 legislation, actually drafting much of the legislative language.

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RETIRING IN DEBT? AN UPDATE ON THE 2007 NEAR-RETIREE COHORT

by Chris E. Anguelov and Christopher R. Tamborini*

This research note uses 2007 Survey of Consumer Finances (SCF) data to update the authors' work reported in a prior article, which used earlier data to assess debt levels among households approaching retirement in 1995 and 2004. The authors assess whether there have been changes in the debt holdings of near-retirees in 2007, a point in time reflecting the start of the recent financial and economic crisis. Results show that debt levels of near-retirees were modestly higher in 2007 than in 2004, overall and across several subgroups. The results reinforce a general finding of the original article that current near-retirees, primarily baby boomers, are approaching retirement with more debt compared with their counterparts in the mid-1990s. Because the 2007 SCF data captures only the beginning of the current recession, the authors expect future trends to differ from the results presented here.

Introduction

Debt, particularly among older Americans, may have important implications for retirement savings (Securian Retirement 2009; Munnell and Soto 2008; Cavanagh and Sharpe 2002; Yuh, Montalto, and Hanna 1998). It may also influence the timing of the retirement transition, as highly indebted individuals may need to work longer to pay off that debt. Although not a financial risk by itself, debt can affect retirement income security, and in general, indicates less financial cushion for the debt holder.

The main purpose of this research note is to update Anguelov and Tamborini (2009), which used earlier versions of the Federal Reserve Board's Survey of Consumer Finances (SCF) to assess debt levels and prevalence among households approaching retirement in 1995 and 2004. Using the recently released 2007 SCF, this note documents whether there have been changes in the debt holdings of near-retirees in 2007, a point in time reflecting the start of the recent financial and economic crisis, relative to 2004.¹

Our analysis compares estimates of debt in families headed by near-retirees (aged 50–61) from the

2007 SCF with similar tabulations for the same age group from the 2004 SCF, reported in Anguelov and Tamborini (2009). Because this analysis captures only the beginning of the current recession and housing downturn, we expect that future trends will differ from the results presented here. However, looking at 2007 estimates is a useful way to examine near-retiree debt at the onset of the financial crisis relative to 2004, a year which essentially reflected the top of a bubble in asset valuations and borrowing.² It also permits investigation of the extent to which increases in debt levels and prevalence found in the 2004 near-retiree cohort, relative to their 1995 counterparts, continue in the 2007 cohort.

The summary measures used in our analysis offer different ways to assess debt. We first report the mean and median debt holdings, as well as the prevalence (percentage holding debt) across both the 2004 and 2007 near-retiree cohorts.³ To assess the impact of debt on a household's financial status, we report the household's debt service ratio (DSR), the prevalence of high-debt burdens and debt relative to assets. Because household debt is not uniform across the population,

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the summary measures are analyzed across several key demographic and socioeconomic subsets of near-retirees defined by age, income, and marital status. Further, because observing debt levels at the population level can mask the impact of debt among debt holders, we present separate estimates for debt holders across those characteristics.

Overall, we expect the more recent 2007 cohort of near-retirees to exhibit higher debt levels than their counterparts in 2004. This expectation is based on our previous results (Anguelov and Tamborini 2009), which showed an increase in the debt of near-retirees from 1995 through 2004 and on the onset of the financial crisis in 2007.

Results: 2004 and 2007

The mean, median, and prevalence of debt among near-retirees in 2004 and 2007, overall and among debt holders only, are shown in Table 1.⁴ On the whole, we observe greater levels of debt among the 2007 near-retiree cohort. Mean debt increased by nearly 16 percent from \$106,769 in 2004 to \$123,715 in 2007, while the median debt rose by an even greater rate of 38 percent, from \$44,261 in 2004 to \$61,000 in 2007. Among debt holders only, an upward pattern is also evident.

Table 1 also shows that general debt levels were not experienced uniformly across all demographic subgroups. Older near-retirees (aged 56–61), as a whole and among debt holders only, experienced greater increases in average debt than near-retirees who were somewhat younger (aged 50–55). Individuals in the lowest third of the income distribution had a higher percentage increase in average total debt from 2004 to 2007 than those with higher incomes. Married and single female near-retirees experienced notable rises in their median total debt.

Consumer and Housing Debt among Near-Retirees

Consumer debt is the focus of Table 2, which shows that near-retirees as a whole experienced little change in all three measures of consumer debt (mean, median, and prevalence) from 2004 to 2007. However, statistically significant increases in consumer debt are observed among some subgroups. For example, lower- and middle-income families and single women experienced increases in their mean consumer debt. Median consumer debt of lower-income families nearly tripled, and that of single women rose more than twofold. When the sample was restricted to consumer debt holders only, many of these increases were not statistically

significant. This suggests that increases in mean debt are due, in part, to increases in prevalence of debt.

Table 3 shows housing debt among near-retirees in 2004 and 2007. Among all near-retiree households, there is significant increases in mean and median housing debt and its prevalence. Among the subgroups, statistically significant increases in mean housing debt were registered by older near-retirees and lower- and higher-income households, as well as married households. Part of this increase was driven by a higher prevalence in housing debt among such subgroups. We observe a similar upward pattern of housing debt when the sample is restricted to households with housing debt; however, the differences become nonsignificant.

Debt Service Ratio, Debt Burden, and Debt Relative to Assets

One method to evaluate the actual impact of debt on the financial circumstance of near-retirees is to examine their DSR. The DSR is calculated as the ratio of monthly debt obligations (referring to the estimated monthly payments to service all existing debt), to monthly disposable family income (after tax).⁵ Consequently, the smaller the DSR, the smaller the share of monthly income committed to debt repayment. For the purposes of this analysis, a high-debt burden is indicated by a DSR exceeding 40 percent of family income, a common cut-off point in the literature (Copeland 2006; Lee, Lown, and Sharpe 2007).

Table 4 reports the mean and median DSR for the 2004 and 2007 near-retiree cohorts, as well as the percentage of households with high-debt burdens for the overall population (including zeros) and among debt holders only. The median DSR of near-retirees remained virtually unchanged from 2004 to 2007, but their mean DSR increased by a third. The share of near-retiree households with high-debt burdens rose from 9.6 percent in 2004 to 13.5 percent in 2007. A clear upward trend in the prevalence of highly debt-burdened families is also present when the sample is limited to debt holders only. Such patterns provide evidence that more near-retiree families were financially burdened by debt in 2007 as compared with 2004.

Among the subgroups, the most notable increase in mean DSR levels from 2004 to 2007 was experienced by the lowest third of the income distribution (0.30 to 0.45), single men (0.15 to 0.30), and married households (0.18 to 0.28). Even near-retirees with the highest income that we observe registered an increase in their mean DSR level. A notable upward shift in median DSR levels in 2007 was recorded by older near-retirees

Table 1.
Household debt among families headed by persons aged 50–61: Mean and median amounts and prevalence, by selected characteristics, 2004 and 2007

Characteristic	Mean household debt (\$)		Median household debt (\$)		Families with household debt (%)	
	2004	2007	2004	2007	2004	2007
<i>All near-retiree households</i>						
All households	106,769	123,715 *	44,261	61,000 *	82.7	84.9 †
Age of family head						
50–55	116,903	124,074	58,758	71,900	87.2	87.8
56–61	94,908	123,256 *	26,359	48,800 *	77.5	81.3
Income thirds						
Lowest	28,988	39,206 *	4,942	10,000 †	70.9	73.9
Middle ^a	81,861	87,656	52,717	66,400 †	88.0	90.0
Highest	211,252	245,172 †	142,776	162,500	89.4	91.0
Family head marital status ^b						
Married	141,111	160,962 †	66,995	90,500 †	87.2	88.3
Single men	64,796	74,579	18,671	13,000	72.9	76.1
Single women	49,945	58,899	11,093	24,000 †	77.6	81.2
<i>Household debt holders only</i>						
Household debt holders	129,079	145,712 †	65,128	83,030 *	100.0	100.0
Age of family head						
50–55	134,067	141,372	77,209	89,000	100.0	100.0
56–61	122,510	151,694 †	51,180	71,600 *	100.0	100.0
Income thirds						
Lowest	40,847	53,074 †	16,474	23,600	100.0	100.0
Middle ^a	93,048	97,388	62,602	78,500 †	100.0	100.0
Highest	236,226	269,304 †	161,447	187,000	100.0	100.0
Family head marital status ^b						
Married	161,943	182,244	97,747	111,830	100.0	100.0
Single men	90,171	97,964	41,515	30,000	100.0	100.0
Single women	64,258	72,526	38,440	46,600	100.0	100.0

SOURCE: Authors' calculations using the 2004 and 2007 Survey of Consumer Finances (SCF).

NOTES: Debt is measured in constant 2007 dollars. Observations are weighted for analysis. Dollar variables in the public data set of the SCF have been rounded by the Federal Reserve Board. The median figures for the 2004 SCF do not appear rounded because they were adjusted to 2007 dollars.

Household debt includes housing debt (for example, primary residence mortgage, home equity lines of credit) and consumer debt (for example, credit card balances, installments).

Designated 2007 estimates differ significantly from comparable 2004 estimates at the following levels (one-tailed tests):

* $p < .05$ and † $p < .10$.

a. Middle third: \$40,607–\$92,492 in 2004; \$43,192–\$93,582 in 2007.

b. Married includes cohabiting couples; single includes separated, divorced, widowed, and never married.

(0.11 to 0.14) and by lower-income households (0.08 to 0.14). Married households also had a higher median DSR in 2007 compared with 2004.

The upward shift in median DSR levels appears to be driven partly by a rise in the proportion of near-retirees with high-debt burdens (DSR>0.40). The percentage of high income near-retirees with high-debt burdens, for example, increased roughly two and a half times (1.7 percent to 6.1 percent), and the proportion of

households led by single men with high-debt burdens increased almost one and a half times. The share with high-debt burdens also increased considerably among younger near-retirees, lower-income families, and married households. These patterns hold when the sample is restricted to debt holders only. Because DSR is essentially a measure of the share of disposable monthly income devoted to servicing debt payments, the increase in the share of highly debt-burdened

Table 2.
Consumer debt among families headed by persons aged 50–61: Mean and median amounts and prevalence, by selected characteristics, 2004 and 2007

Characteristic	Mean consumer debt (\$)		Median consumer debt (\$)		Families with consumer debt (%)	
	2004	2007	2004	2007	2004	2007
All near-retiree households						
All households	15,911	16,719	4,503	5,070	68.7	70.9
Age of family head						
50–55	15,848	17,755	5,535	6,000	72.7	73.3
56–61	15,983	15,398	3,515	3,600	64.0	68.0
Income thirds						
Lowest	5,882	7,412 †	604	1,800 †	60.7	65.1
Middle ^a	13,416	16,771 *	7,908	8,950	73.5	79.3 †
Highest	28,661	26,110	9,885	7,000	72.0	68.6
Family head marital status ^b						
Married	21,163	21,692	7,688	7,200	74.2	72.6
Single men	9,799	6,788	99	1,000	50.1	60.2 †
Single women	7,138	9,848 *	1,768	4,000 †	65.8	72.7
Consumer debt holders only						
Consumer debt holders	23,164	23,568	12,081	12,000	100.0	100.0
Age of family head						
50–55	21,805	24,238	11,686	11,500	100.0	100.0
56–61	24,971	22,646	12,300	12,000	100.0	100.0
Income thirds						
Lowest	9,676	11,385	5,052	6,340	100.0	100.0
Middle ^a	18,265	21,153	14,388	13,000	100.0	100.0
Highest	39,830	38,059	19,769	17,400	100.0	100.0
Family head marital status ^b						
Married	28,537	29,901	15,266	16,000	100.0	100.0
Single men	19,512	11,269 *	10,983	8,460	100.0	100.0
Single women	10,855	13,549 †	6,590	7,000	100.0	100.0

SOURCE: Authors' calculations using the 2004 and 2007 Survey of Consumer Finances (SCF).

NOTES: Debt is measured in constant 2007 dollars. Observations are weighted for analysis. Dollar variables in the public data set of the SCF have been rounded by the Federal Reserve Board. The median figures for the 2004 SCF do not appear rounded because they were adjusted to 2007 dollars.

Designated 2007 estimates differ significantly from comparable 2004 estimates at the following levels (one-tailed tests):

* $p < .05$ and † $p < .10$.

a. Middle third: \$40,607–\$92,492 in 2004; \$43,192–\$93,582 in 2007.

b. Married includes cohabiting couples; single includes separated, divorced, widowed, and never married.

households may be particularly problematic for near-retirees with low income.

Another way to assess the impact of debt on a household's financial circumstance is to examine the ratio of a household's total debt to the sum of its financial and nonfinancial assets. The higher the ratio, the more likely a household would face difficulties repaying its debts if its income was abruptly halted or assets declined in value. A debt-to-assets ratio greater than 1.0 indicates negative net worth.

Table 5 presents the mean and median debt-to-assets ratio for the 2004 and 2007 cohorts, overall and among debt holders only. Overall, estimates show statistically similar mean and median debt-to-assets ratios among near-retirees.⁶ Among the subgroups, our results show only two, somewhat incongruent, statistically significant outcomes with respect to changes in the ratio. Specifically, older near-retirees had a statistically significant increase in their median debt-to-assets ratio, which went up from 0.10 in 2004 to 0.14 in 2007. Among older near-retirees who held debt, the mean debt-to-assets

Table 3.
Housing debt among families headed by persons aged 50–61: Mean and median amounts and prevalence, by selected characteristics, 2004 and 2007

Characteristic	Mean housing debt (\$)		Median housing debt (\$)		Families with housing debt (%)	
	2004	2007	2004	2007	2004	2007
All near-retiree households						
All households	90,859	106,996 *	31,850	48,000 †	59.5	63.9 †
Age of family head						
50–55	101,055	106,319	47,226	55,000	65.0	66.5
56–61	78,925	107,859 *	10,543	27,000	53.0	60.4 †
Income thirds						
Lowest	23,106	31,794 †	0		33.5	40.4 †
Middle ^a	68,445	70,885	40,636	54,000	67.2	68.5
Highest	182,591	219,063 †	123,007	138,000	78.2	83.0
Family head marital status ^b						
Married	119,947	139,370 †	54,914	75,000 *	68.8	72.4
Single men	55,997	67,791	0		46.0	45.0
Single women	42,806	49,051	0	10,000	45.1	52.9 †
Housing debt holders only						
Housing debt holders	152,877	167,580	94,452	100,000	100.0	100.0
Age of family head						
50–55	155,570	159,789	94,451	105,000	100.0	100.0
56–61	149,012	178,528	94,452	91,000	100.0	100.0
Income thirds						
Lowest	69,024	78,628	51,619	60,000	100.0	100.0
Middle ^a	101,927	103,507	82,371	84,000	100.0	100.0
Highest	233,526	263,922	155,956	175,000	100.0	100.0
Family head marital status ^b						
Married	174,278	192,244	114,221	125,000	100.0	100.0
Single men	121,953	150,757	76,880	79,000	100.0	100.0
Single women	94,939	92,767	65,897	79,000	100.0	100.0

SOURCE: Authors' calculations using the 2004 and 2007 Survey of Consumer Finances (SCF).

NOTES: Debt is measured in constant 2007 dollars. Observations are weighted for analysis. Dollar variables in the public data set of the SCF have been rounded by the Federal Reserve Board. The median figures for the 2004 SCF do not appear rounded because they were adjusted to 2007 dollars.

Designated 2007 estimates differ significantly from the comparable 2004 estimates at the following levels (one-tailed tests):

* $p < .05$ and † $p < .10$.

a. Middle third: \$40,607–\$92,492 in 2004; \$43,192–\$93,582 in 2007.

b. Married includes cohabiting couples; single includes separated, divorced, widowed, and never married.

ratio recorded a statistically significant decrease (0.82 to 0.35). However, upon closer inspection of the distribution of the ratio among this group, the apparent drop in their mean ratio appears to be driven almost entirely by outliers at the 99th percentile. More specifically, the debt-to-assets ratio of near-retirees aged 56–61 in 2004 and 2007 is similar across most of the percentiles (10th, 25th, 50th, 75th, 90th, 95th). The differences lie at the 99th percentile (and above), which was around 7.7 in 2004 compared with 2.0 in 2007. Among older near-retirees who held debt, the debt-to-assets ratio at the

99th percentile was 11.0 in 2004 compared with 4.4 in 2007. Both sets of estimates show a sharp decrease at the 99th percentile from 2004 to 2007. To account for this difference, our analysis includes both the median and the mean debt-to-assets ratios, as the former is less affected by the presence of outliers than the latter.

Conclusions

Using the 2007 SCF to update Anguelov and Tamborini (2009), this research note shows that the overall debt levels of near-retirees in 2007 were modestly higher

Table 4.**Mean and median debt service ratio (DSR)^a and percent carrying high-debt burdens^b among families headed by persons aged 50–61, by selected characteristics, 2004 and 2007**

Characteristic	Mean DSR		Median DSR		Households with DSR > 0.40 (%)	
	2004	2007	2004	2007	2004	2007
All near-retiree households						
All households	0.21	0.28 *	0.14	0.15	9.6	13.5 *
Age of family head						
50–55	0.22	0.28	0.15	0.16	11.0	15.8 *
56–61	0.21	0.27	0.11	0.14 †	8.0	10.6
Income thirds						
Lowest	0.30	0.45 †	0.08	0.14 *	17.6	23.4 *
Middle ^c	0.20	0.21	0.17	0.20	9.4	10.8
Highest	0.14	0.17 *	0.14	0.13	1.7	6.1 *
Family head marital status ^d						
Married	0.18	0.28 *	0.14	0.16 *	7.4	10.4 †
Single men	0.15	0.30	0.10	0.10	6.6	16.4 *
Single women	0.33	0.25	0.12	0.16	16.2	19.7
Debt holders only						
Debt holders	0.26	0.33 †	0.17	0.19 †	11.6	15.9 *
Age of family head						
50–55	0.25	0.32	0.18	0.19	12.6	18.0 *
56–61	0.27	0.33	0.16	0.18	10.3	13.0
Income thirds						
Lowest	0.42	0.61	0.19	0.25 †	24.7	31.7 †
Middle ^c	0.23	0.23	0.19	0.22	10.7	12.0
Highest	0.16	0.18	0.15	0.15	1.9	6.7 *
Family head marital status ^d						
Married	0.20	0.32 *	0.16	0.19 *	8.5	11.7 †
Single men	0.20	0.39	0.17	0.16	9.1	21.5 *
Single women	0.43	0.31	0.21	0.20	20.8	24.2

SOURCE: Authors' calculations using the 2004 and 2007 Survey of Consumer Finances (SCF).

NOTES: Debt is measured in constant 2007 dollars. Observations are weighted for analysis. Dollar variables in the public data set of the SCF have been rounded by the Federal Reserve Board. The median figures for the 2004 SCF do not appear rounded because they were adjusted to 2007 dollars.

Designated 2007 estimates differ significantly from comparable 2004 estimates at the following levels (one-tailed tests):

* $p < .05$ and † $p < .10$.

- Defined as the ratio of required monthly housing and consumer debt payments (excluding rent) to monthly disposable personal income.
- High-debt burden is indicated if debt service payments exceed 40 percent of household income.
- Middle third: \$40,607–\$92,492 in 2004; \$43,192–\$93,582 in 2007.
- Married includes cohabiting couples; single includes separated, divorced, widowed, and never married.

than in 2004. This result reinforces a general finding of our previous work that current near-retirees—comprised primarily of persons from the baby-boom generation—are approaching retirement with more debt compared with their counterparts in the mid-1990s.

Our updated estimates reveal a substantial increase in the share of high debt-burdened near-retirees in 2007 relative to 2004, overall and across a number of subgroups. This pattern suggests that because of debt,

more recent cohorts will reach retirement age with less financial cushion than their predecessors. A noteworthy finding emerging from our analysis of subgroups is that lower-income households experienced considerable increases in average total debt, consumer debt, and housing debt levels from 2004 to 2007. More problematic in terms of financial well-being, the analysis reveals sharp relative increases in the mean and median DSRs in lower-income households

Table 5.**Mean and median debt-to-assets ratio^a among families headed by persons aged 50–61, by selected characteristics, 2004 and 2007**

Characteristic	Mean debt-to-assets ratio		Median debt-to-assets ratio	
	2004	2007	2004	2007
All near-retiree households				
All households	0.70	0.86	0.16	0.18
Age of family head				
50–55	0.76	1.31	0.21	0.22
56–61	0.63	0.28	0.10	0.14 *
Income thirds				
Lowest	1.57	2.05	0.11	0.16
Middle ^b	0.31	0.29	0.19	0.22
Highest	0.21	0.22	0.16	0.16
Family head marital status ^c				
Married	0.29	0.30	0.16	0.19
Single men	0.77	1.50	0.07	0.07
Single women	1.61	1.89	0.17	0.20
Debt holders only				
Debt holders	0.85	1.01	0.22	0.23
Age of family head				
50–55	0.87	1.45	0.25	0.26
56–61	0.82	^d 0.35 *	0.17	0.19
Income thirds				
Lowest	2.21	2.77	0.29	0.32
Middle ^b	0.35	0.33	0.24	0.25
Highest	0.24	0.24	0.18	0.18
Family head marital status ^c				
Married	0.33	0.34	0.20	0.22
Single men	1.05	1.97	0.18	0.18
Single women	2.07	2.33	0.31	0.24

SOURCE: Authors' calculations using the 2004 and 2007 Survey of Consumer Finances (SCF).

NOTES: Debt is measured in constant 2007 dollars. Observations are weighted for analysis. Dollar variables in the public data set of the SCF have been rounded by the Federal Reserve Board. The median figures for the 2004 SCF do not appear rounded because they were adjusted to 2007 dollars.

Designated 2007 estimates differ significantly from comparable 2004 estimates at the following levels (one-tailed tests):

* $p < .05$ and † $p < .10$.

- Defined as the ratio of a household's combined consumer and housing debt to combined financial and nonfinancial assets. Financial assets include liquid assets, certificates of deposit, directly held mutual funds, stocks, bonds, savings bonds, the cash value of whole life insurance, other trusts, annuities, and managed investment accounts. Nonfinancial assets include the value of all vehicles, primary residence, other residential real estate, net equity in nonresidential real estate, and business interests.
- Middle third: \$40,607–\$92,492 in 2004; \$43,192–\$93,582 in 2007.
- Married includes cohabiting couples; single includes separated, divorced, widowed, and never married.
- This drop in the mean ratio is almost entirely driven by differences in the outliers at the 99th percentile between 2004 and 2007. The debt-to-assets ratio of near-retirees aged 56–61 in 2004 and 2007 is similar across much of the percentile distribution (10th, 25th, 50th, 75th, 90th, 95th).

in 2007, as well as a rising share with a DSR of over 40 percent.

Our results do not capture the full impact of the financial crisis, which manifested at the end of 2007 and in 2008.⁷ As more recent data become available,⁸ further analysis of debt levels and their impact on

the financial circumstance of near-retirees would be beneficial. Another avenue to explore is change in the composition of debt, particularly in times of weak economic growth. For example, an increase over time in high-interest unsecured debt (debt not backed up by assets) may reduce a borrower's ability to repay the

debt by requiring that a larger portion of a household's income go toward servicing this debt. Other valuable research topics may include analysis of the extent to which debt affects the savings rates of near-retirees or the age at which older Americans claim Social Security retirement benefits. One question to examine with data that more fully capture the financial crisis is how it has affected the asset side of near-retiree household balance sheets. For example, downward directions in stock and home prices, without corresponding reductions in debt, would tend to lead to rising debt-to-assets ratios.

Notes

¹ For further description of the SCF, see Anguelov and Tamborini (2009) and Lindamood, Hanna, and Bi (2007).

² Data for the 2007 SCF was collected from May 2007 to March 2008. The majority of the interviews were conducted before the end of 2007 (Kennickell 2008).

³ Debt is divided into two parts: consumer and housing. Consumer debt includes credit card and installment debt, such as automobile loans. Housing debt includes mortgage, residential, and other residential housing debt, such as debt on properties other than the principal residence, time shares, and vacation homes.

⁴ The demographic characteristics of the two cross-sectional samples of near-retirees in 2004 and 2007 are statistically similar. Standard errors were computed using replicate sample weights provided by the Federal Reserve Board (results can be provided by the authors upon request). This method produces standard errors that take into account both sampling and imputation errors (Rubin 1987). We use one-tailed tests based on our expectations of an increase in debt. All results discussed in this study are significant at least at the 90 percent confidence level unless otherwise indicated. Note that all dollars are adjusted to 2007.

⁵ When constructing the DSR variable, we avoided dividing by values of zero by assigning a value to income equal to \$100 for those respondents with \$0 income (0.3 percent in 2004 and 0.8 percent in 2007). Had we not done this, we would have had to remove the families with \$0 income, which would have introduced a potential bias. When constructing the debt-to-assets ratio variable, we avoided dividing by values of zero by assigning a value to assets equal to \$100 for those respondents with \$0 assets (2.2 percent in 2004 and 1.2 percent in 2007).

⁶ The standard deviation of the debt-to-assets ratio in 2007 is around two and a half times greater than that of the 2004 ratio, indicating greater variation in the ratio of the most recent cohort.

⁷ According to a press release by the Bureau of Labor Statistics, the recession in the United States economy did not start until December 2007 (<http://www.bls.gov/news.release/empst.nr0.htm>).

⁸ To provide more up-to-date information on the effects of the economic and financial crises, the Federal Reserve Board conducted a special study of the Survey of Consumer Finances in 2009. Although the SCF is typically administered every 3 years and is cross sectional, the board reinterviewed participants in the 2007 survey in 2009 to collect data on respondents' more recent financial circumstances. Data from this survey are expected to be available by the end of 2010 (Board of Governors 2009).

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INTRODUCTION AND OVERVIEW OF THE 2010 ANNUAL REPORT OF THE BOARD OF TRUSTEES OF THE FEDERAL OLD-AGE AND SURVIVORS INSURANCE AND FEDERAL DISABILITY INSURANCE TRUST FUNDS

I. INTRODUCTION

The Old-Age, Survivors, and Disability Insurance (OASDI) program in the United States makes available a basic level of monthly income upon the attainment of retirement eligibility age, death, or disability by insured workers. The OASDI program consists of two separate parts that pay benefits to workers and their families—Old-Age and Survivors Insurance (OASI) and Disability Insurance (DI). Under OASI, monthly benefits are paid to retired workers and their families and to survivors of deceased workers. Under DI, monthly benefits are paid to disabled workers and their families.

The Board of Trustees was established under the Social Security Act to oversee the financial operations of the OASI and DI Trust Funds. The Board is composed of six members. Four members serve by virtue of their positions in the Federal Government: the Secretary of the Treasury, who is the Managing Trustee; the Secretary of Labor; the Secretary of Health and Human Services; and the Commissioner of Social Security. The other two positions, which are currently vacant, are for members of the public, appointed by the President and subject to confirmation by the Senate. The Deputy Commissioner of the Social Security Administration (SSA) is designated as Secretary of the Board.

The Social Security Act requires that the Board, among other duties, report annually to the Congress on the actuarial (financial) status of the OASI and DI Trust Funds. This annual report, for 2010, is the 70th such report.

II. OVERVIEW

A. HIGHLIGHTS

The report's major findings are summarized below.

In 2009

At the end of 2009, about 53 million people were receiving benefits: 36 million retired workers and dependents of retired workers, 6 million survivors of deceased workers, and 10 million disabled workers and dependents of disabled workers. During the year, an estimated 156 million people had earnings covered by Social Security and paid payroll taxes. Total expenditures in 2009 were \$686 billion. Total income was \$807 billion (\$689 billion in tax revenue and \$118 billion in interest earnings), and assets held in special issue U.S. Treasury securities grew to \$2.5 trillion.

Short-Range Results

The assets of the OASI Trust Fund and of the combined OASI and DI Trust Funds are projected to be adequate over the next 10 years under the intermediate assumptions. However, the assets of the DI Trust Fund are projected to steadily decline over the next 10 years under the intermediate assumptions, falling below 100 percent of annual cost by the beginning of 2013 and continuing to decline until the trust fund is exhausted in 2018. Therefore, the DI Trust Fund does not satisfy the short-range test of financial adequacy. The combined assets of the OASI and DI Trust Funds are projected to grow from \$2,540 billion at the beginning of 2010, or 355 percent of annual cost, to \$3,774 billion at the beginning of 2019, or 309 percent of annual cost in that year under the intermediate assumptions. Combined assets were projected for last year's report to be 360 percent of annual cost at the beginning of 2010 and 327 percent at the beginning of 2019.

Long-Range Results

Under the intermediate assumptions, OASDI cost generally increases more rapidly than tax income through 2035 because the retirement of the baby-boom generation increases the number of beneficiaries much faster than subsequent relatively low-birth-rate generations increase the labor force. From 2035 to 2050, the cost rate declines somewhat due principally to the aging of the already retired baby-boom generation. Thereafter, increases in life expectancy generally cause OASDI cost to again increase relative to tax income, but more slowly than prior to 2035. Annual cost is projected to exceed tax income in 2010 and 2011, to be less than tax income in 2012 through 2014, then to exceed tax income in 2015 and remain higher throughout the remain-

der of the long-range period. Interest earnings on trust fund assets alone will be sufficient to cover the annual difference between cost and tax revenue until 2025. The dollar level of the Trust Funds is projected to be drawn down beginning in 2025 until assets are exhausted in 2037. Individually, the DI fund is projected to be exhausted in 2018 and the OASI fund in 2040. For the 75-year projection period, the actuarial deficit is 1.92 percent of taxable payroll, 0.08 percentage point smaller than in last year's report. The open group unfunded obligation for OASDI over the 75-year period is \$5.4 trillion in present value and is \$0.1 trillion more than the measured level of a year ago. If the assumptions, methods, starting values, and the law had all remained unchanged, the unfunded obligation would have risen to about \$5.7 trillion due to the change in the valuation date.

The OASDI annual cost rate is projected to increase from 13.09 percent of taxable payroll in 2010 to 16.73 percent in 2035 and to 17.43 percent in 2084, a level that is 4.12 percent of taxable payroll more than the projected income rate for 2084. For last year's report, the OASDI cost for 2084 was estimated at 17.73 percent, or 4.39 percent of payroll more than the annual income rate for that year. Expressed in relation to the projected gross domestic product (GDP), OASDI cost is estimated to rise from the current level of 4.8 percent of GDP to about 6.1 percent in 2035, then to decline to 5.9 percent by 2050, and to remain between 5.9 and 6.0 percent through 2084.

Conclusion

Under the long-range intermediate assumptions, annual cost for the OASDI program is projected to exceed tax income in 2010 and 2011, to be less than tax income in 2012 through 2014, then to exceed tax income in 2015 and remain higher throughout the remainder of the long-range period. The combined OASI and DI Trust Funds are projected to increase in dollar level through 2024, and then to decline and become exhausted and thus unable to pay scheduled benefits in full on a timely basis in 2037. However, the DI Trust Fund is projected to become exhausted in 2018, so some action will be needed in the next few years. At a minimum, a reallocation of the payroll tax rate between OASI and DI would be necessary, as was done in 1994.

For the combined OASDI Trust Funds to remain solvent throughout the 75-year projection period, the combined payroll tax rate could be increased during the period in a manner equivalent to an immediate and permanent increase of 1.84 percentage points,¹ scheduled benefits could be reduced during the period in a manner equivalent to an immediate and permanent reduction of 12.0 percent, general revenue transfers equivalent to \$5.4 trillion in present value could be made during the period, or some combination of approaches could be adopted. Significantly larger changes would be required to maintain solvency beyond 75 years.

The projected trust fund shortfalls should be addressed in a timely way so that necessary changes can be phased in gradually and workers can be given time to plan for them. Implementing changes sooner will allow the needed revenue increases or benefit reductions to be spread over more generations. Social Security plays a critical role in the lives of 54 million beneficiaries and 155 million covered workers and their families in 2010. With informed discussion, creative thinking, and timely legislative action, present and future Congresses and Presidents can ensure that Social Security continues to protect future generations.

¹ The necessary tax rate increase differs from the 1.92 percent actuarial deficit for two reasons. First, the necessary tax rate is that required to maintain solvency throughout the period, but not to result in any trust fund reserve at the end of the period. Second, the necessary tax rate is increased based on the expectation that any change in tax rates will affect the proportion of employee compensation that is paid in wages.

B. TRUST FUND FINANCIAL OPERATIONS IN 2009

The table below shows the income, expenditures, and assets for the OASI, the DI, and the combined OASDI Trust Funds in calendar year 2009.

Table II.B1.—Summary of 2009 Trust Fund Financial Operations
(In billions)

	OASI	DI	OASDI
Assets at the end of 2008	\$2,202.9	\$215.8	\$2,418.7
Total income in 2009	698.2	109.3	807.5
Net contributions	570.4	96.9	667.3
Taxation of benefits	19.9	2.0	21.9
Interest	107.9	10.5	118.3
Total expenditures in 2009	564.3	121.5	685.8
Benefit payments	557.2	118.3	675.5
Railroad Retirement financial interchange	3.7	.4	4.1
Administrative expenses	3.4	2.7	6.2
Net increase in assets in 2009	133.9	-12.2	121.7
Assets at the end of 2009	2,336.8	203.5	2,540.3

Note: Totals do not necessarily equal the sums of rounded components.

In 2009, net contributions accounted for 83 percent of total trust fund income. Net contributions consist of taxes paid by employees, employers, and the self-employed on earnings covered by Social Security. These taxes are paid on covered earnings up to a specified maximum annual amount, which was \$106,800 in 2009. The tax rates scheduled under current law for 2009 and later are shown in table II.B2.

Table II.B2.—Tax Rates for 2009 and Later

	OASI	DI	OASDI
Tax rate for employees and employers, each (in percent)	5.30	0.90	6.20
Tax rate for self-employed persons (in percent)	10.60	1.80	12.40

Three percent of OASDI Trust Fund income came from subjecting up to 50 percent of Social Security benefits above specified levels to Federal personal income taxation, and 15 percent of OASDI income came from interest earned on investment of OASDI Trust Fund reserves. Trust fund assets are invested in interest-bearing securities of the U.S. Government. In 2009, the combined trust fund assets earned interest at an effective annual rate of 4.9 percent. More than 98 percent of expenditures from the combined OASDI

Trust Funds in 2009 were retirement, survivor, and disability benefits totaling \$675.5 billion. The financial interchange with the Railroad Retirement program resulted in a net payment of \$4.1 billion from the combined OASDI Trust Funds, or about 0.6 percent of total expenditures. The administrative expenses of the Social Security program were \$6.2 billion, or about 0.9 percent of total expenditures.

Assets of the trust funds provide a reserve to pay benefits whenever total program cost exceeds income. Trust fund assets increased by \$121.7 billion in 2009 because income to the combined funds exceeded expenditures. At the end of 2009, the combined assets of the OASI and the DI Trust Funds were 355 percent of estimated expenditures for 2010, up from an actual level of 353 percent at the end of 2008.

C. ASSUMPTIONS ABOUT THE FUTURE

Future income and expenditures of the OASI and DI Trust Funds will depend on many factors, including the size and characteristics of the population receiving benefits, the level of monthly benefit amounts, the size of the workforce, and the level of workers' earnings. These factors will depend in turn on future birth rates, death rates, immigration, marriage and divorce rates, retirement-age patterns, disability incidence and termination rates, employment rates, productivity gains, wage increases, inflation, and many other demographic, economic, and program-specific factors.

The intermediate demographic and economic assumptions shown in table II.C1 reflect the Trustees' best estimates of future experience, and therefore most of the figures in this overview depict only the outcomes under the intermediate assumptions. Any projection of the future is, of course, uncertain. For this reason, alternatives I (low-cost) and III (high-cost) are included to provide a range of possible future experience. The assumptions for these two alternatives are also shown in table II.C1, and their implications are highlighted in a separate section, beginning on page 15, on the uncertainty of the projections.

Assumptions are reexamined each year in light of recent experience and new information. This annual review helps to ensure that the assumptions provide the Trustees' best estimate of future possibilities.

Table II.C1.—Long-Range Values^a of Key Demographic and Economic Assumptions for the 75-year Projection Period

Long-range assumptions	Intermediate	Low-cost	High-cost
Total fertility rate (children per woman), starting in 2034	2.0	2.3	1.7
Average annual percentage reduction in total age-sex-adjusted death rates from 2034 to 2084 . . . . .	.77	.35	1.24
Average annual net immigration (in thousands) for years 2010-84	1,065	1,370	780
Productivity (total U.S. economy), starting in 2020	1.7	2.0	1.4
Average annual percentage change in average wage in covered employment from 2019 to 2084	4.0	3.6	4.4
Consumer Price Index (CPI), starting in 2014	2.8	1.8	3.8
Average annual real-wage differential (percent) for years 2020-84	1.2	1.8	.6
Unemployment rate (percent), starting in 2019	5.5	4.5	6.5
Annual trust fund real interest rate (percent), starting in 2020 . .	2.9	3.6	2.1

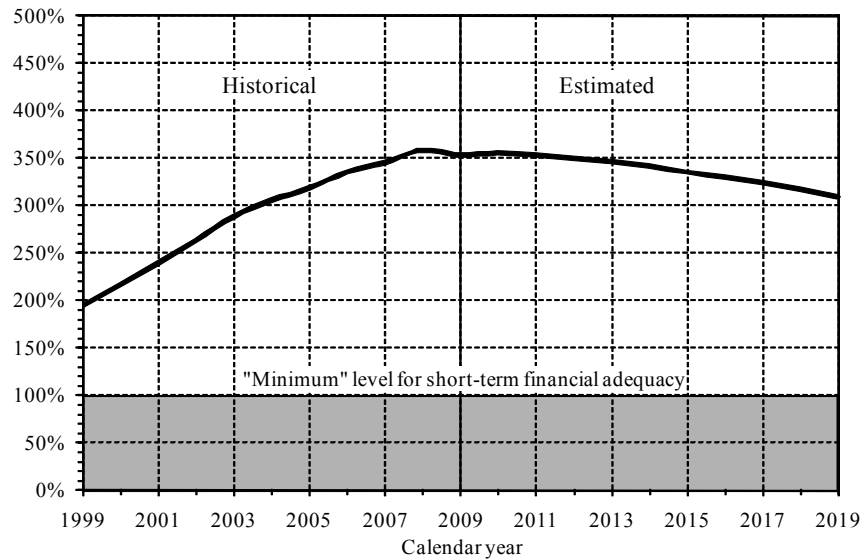
^a See chapter V for details, including historical values and projected values.

D. PROJECTIONS OF FUTURE FINANCIAL STATUS

Short-Range Actuarial Estimates

For the short range (2010-2019), the Trustees measure financial adequacy by comparing projected assets at the beginning of each year to projected program cost for that year under the intermediate set of assumptions. A trust fund ratio of 100 percent or more—that is, assets at the beginning of each year at least equal to projected cost for the year—is a good indication of a trust fund’s ability to cover most short-term contingencies. The projected trust fund ratios for OASI alone, and for OASI and DI combined, under the intermediate assumptions exceed 100 percent throughout the short-range period and therefore OASI and OASDI satisfy the Trustees’ short-term test of financial adequacy. However, the DI Trust Fund fails the Trustees’ short-term test of financial adequacy. Its trust fund ratio is projected to fall below the 100 percent level by the beginning of 2013. After 2013, the DI trust fund ratio continues to decline until the trust fund is exhausted in 2018. Figure II.D1 below shows that the trust fund ratios for the combined OASI and DI Trust Funds decline gradually after 2010.

Figure II.D1.—Short-Range OASDI Trust Fund Ratio
[Assets as a percentage of annual expenditures]



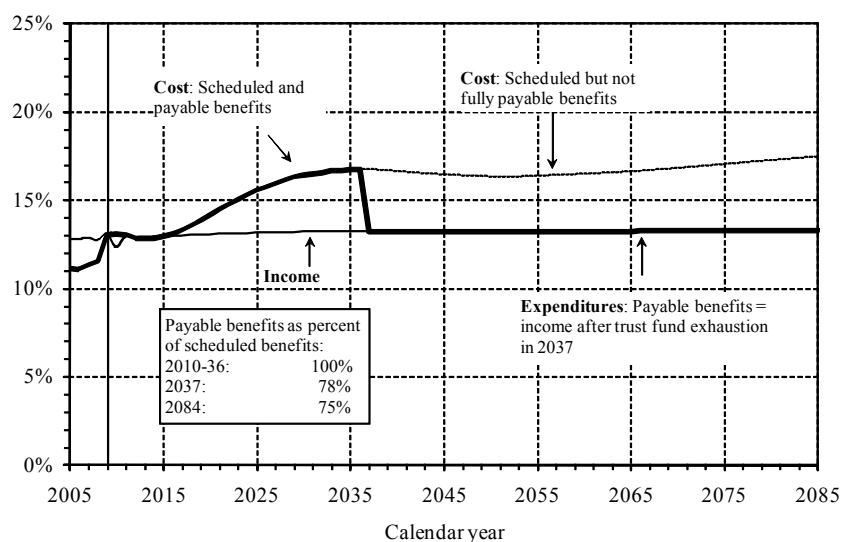
Long-Range Actuarial Estimates

The actuarial status of the program over the next 75 years is measured in terms of annual cost and income as a percentage of taxable payroll, trust fund ratios, the actuarial balance (also as a percentage of taxable payroll), and the open group unfunded obligation (expressed in present-value dollars and as percentages of taxable payroll and gross domestic product (GDP)). Considering Social Security's annual cost and income as a percentage of the total U.S. economic output or GDP provides an additional important perspective.

The year-by-year relationship among income (excluding interest), cost (including scheduled benefits), and expenditures (including payable benefits) for the OASDI program is illustrated in figure II.D2 for the full 75-year period. All values are expressed as percentages of taxable payroll and, in the case of income and cost, are referred to as the income rate and the cost rate, respectively. Under the intermediate assumptions, the OASDI cost rate is projected to remain relatively stable for the next 5 years, and then to increase rapidly before leveling off starting in about 2035. The projected income rate is stable at about 13 percent throughout the 75-year period except for a dip in 2010 due to the economic recession and to an expected \$25 billion downward adjustment to 2010 income that corrects for excess payroll tax revenue credited to the Trust Funds in earlier years. The cost rate is projected to exceed the income rate in 2010 and 2011 because of the severity of the recent recession. The cost rate falls below the income rate in 2012 through 2014 as the economy recovers, then rises above the income rate again beginning in 2015. After 2015, the difference between the cost rate and the income rate grows rapidly through 2035.

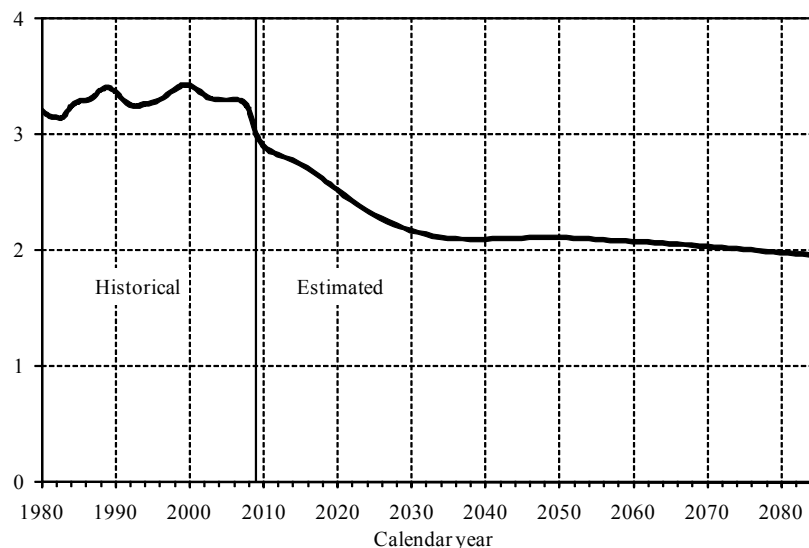
For 2010 through 2024, trust fund income, including interest income, is more than is needed to cover costs, so trust fund assets will continue to grow. Beginning in 2025, trust fund assets will diminish until they become exhausted in 2037. Tax revenues are projected to be sufficient to support expenditures at a level of 78 percent of scheduled benefits after trust fund exhaustion in 2037, declining to 75 percent of scheduled benefits in 2084.

Figure II.D2.—OASDI Income, Cost, and Expenditures as Percentages of Taxable Payroll
 [Under Intermediate Assumptions]



The estimated number of workers per beneficiary is shown in figure II.D3. There were about 3.0 workers for every OASDI beneficiary in 2009. This ratio had been extremely stable, remaining between 3.2 and 3.4 from 1974 through 2008, and is lower for 2009 due to the economic recession. The projected future increase in the cost rate reflects a projected decline in the number of covered workers per beneficiary. The ratio of workers to beneficiaries is projected to decline, even as the economy recovers, because the workers of the baby-boom generation are being replaced in the workforce by relatively low-birth-rate generations. This ratio reaches 2.1 by 2035 when the baby-boom generation will have largely retired, with a further gradual decline thereafter due to increasing longevity.

Figure II.D3.—Number of Covered Workers Per OASDI Beneficiary



The maximum projected trust fund ratios for the OASI, DI, and combined funds appear in table II.D1. The year in which the maximum projected trust fund ratio is attained and the year in which the assets are projected to be exhausted are shown as well.

Table II.D1.—Projected Maximum Trust Fund Ratios Attained and Trust Fund Exhaustion Dates
[Under the Intermediate Assumptions]

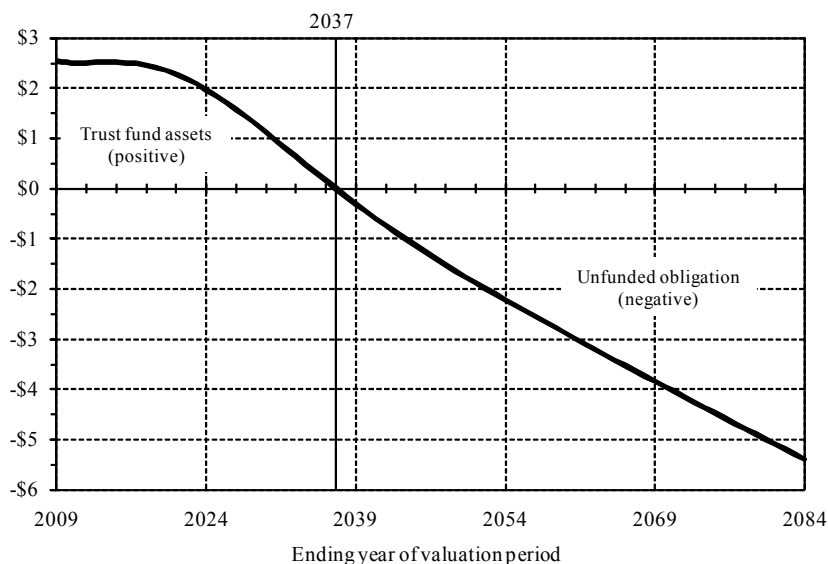
	OASI	DI	OASDI
Maximum trust fund ratio (percent)	403	158	355
Year attained	2012	2010	2010
Year of trust fund exhaustion	2040	2018	2037

The actuarial balance is a measure of the program’s financial status for the 75-year valuation period as a whole. It is essentially the difference between income and cost of the program expressed as a percentage of taxable payroll over the valuation period. When the actuarial balance is negative, the actuarial deficit can be interpreted as the percentage that could be added to the current-law income rate for each of the next 75 years, or subtracted from the cost rate for each year, to bring the funds into actuarial balance. This measure should be viewed only as a rough indication of the amount of change that is needed over the 75-year period as a whole, because the effects of future changes are unlikely to follow this pattern. In this report, the actuarial

balance under the intermediate assumptions is a deficit of 1.92 percent of taxable payroll for the combined OASI and DI Trust Funds. The actuarial deficit was 2.00 percent in the 2009 report and has been in the range of 1.70 percent to 2.23 percent for the prior 15 reports. If the assumptions, methods, starting values, and the law had all remained unchanged from last year, the actuarial deficit in this report would have increased to 2.06 percent of payroll.

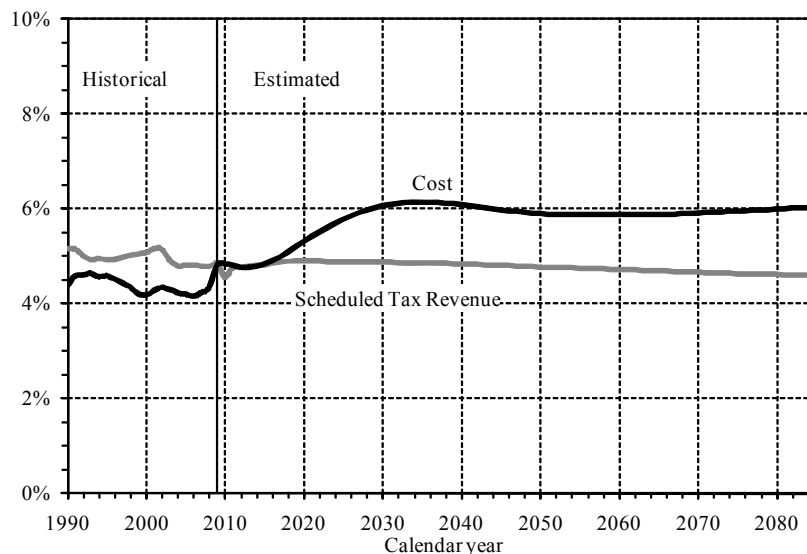
Another way to illustrate the financial shortfall of the OASDI program is to examine the cumulative value of income less cost, in present value. Figure II.D4 shows the present value of cumulative OASDI income less cost from the inception of the program through each of the next 75 years. The balance of the combined trust funds is \$2.5 trillion in 2010. This cumulative amount declines after 2010 in present value, but continues to be positive, indicating trust fund assets, or reserves, through 2036. However, after 2036 this cumulative amount becomes negative, which means that the OASDI Trust Funds have a net unfunded obligation through each year after 2036. Through the end of 2084, the combined funds have a present-value unfunded obligation of \$5.4 trillion. This unfunded obligation represents 1.8 percent of future taxable payroll and 0.6 percent of future GDP through the end of the 75-year projection period. The 0.14 percentage point difference between the unfunded obligation as a share of taxable payroll (1.78 percent) and the actuarial balance (1.92 percent) reflects the additional requirement of an ending trust fund balance equal to one year's cost for the actuarial balance measure.

**Figure II.D4.—Cumulative OASDI Income Less Cost,
Based on Present Law Tax Rates and Scheduled Benefits**
[Present value as of January 1, 2010, in trillions]



Another important way to look at Social Security’s future is to view its annual cost and tax income as a share of U.S. economic output. Figure II.D5 shows that Social Security’s cost as a percentage of GDP is projected to grow from 4.8 percent in 2010 to about 6.1 percent in 2035, then to decline to 5.9 percent by 2050, and to remain between 5.9 and 6.0 percent through 2084. Social Security’s scheduled tax revenue is projected to increase from its current level of about 4.6 percent of GDP to about 4.9 percent of GDP for 2019, as the economy recovers. Thereafter, tax income as a percent of GDP declines gradually, reaching about 4.6 percent by 2084. Income from payroll taxes declines generally in relation to GDP in the future because an increasing share of employee compensation is assumed to be provided in fringe benefits, especially for health care, making wages a declining share of GDP.

Figure II.D5.—OASDI Cost and Scheduled Tax Revenue as a Percentage of GDP



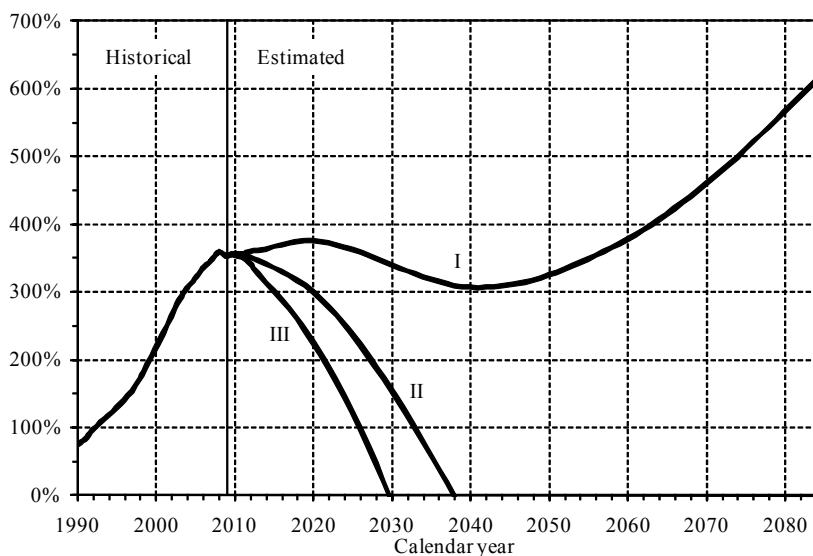
Figures II.D2, II.D4, and II.D5 show that the program's financial condition is worsening at the end of the projection period. Overemphasis on summary measures alone for a 75-year period can lead to incorrect perceptions and to policy prescriptions that do not achieve sustainable solvency. Thus, careful consideration of the trends in annual deficits and unfunded obligations toward the end of the 75-year period is important. In addition, summary measures for a time period that extends to the infinite horizon are included in this report. These measures provide an additional indication of Social Security's very long-run financial condition, but are subject to much greater uncertainty. These calculations show that extending the horizon beyond 75 years increases the unfunded obligation. Over the infinite horizon, the shortfall (unfunded obligation) amounts to \$16.1 trillion in present value, 3.3 percent of future taxable payroll, or 1.2 percent of future GDP. These calculations of the shortfall indicate that much larger changes may be required to achieve solvency beyond the 75-year period as compared to changes needed to balance 75-year period summary measures. The measured unfunded obligation over the infinite horizon is increased from \$15.1 trillion in last year's report. If the assumptions, methods, starting values, and the law had all remained unchanged, the unfunded obligation over the infinite horizon would have risen to \$15.9 trillion due to the change in the valuation date. Expressed as a percentage of taxable payroll, the measured unfunded obligation over the infinite horizon decreased from 3.4 percent in last year's report to 3.3 percent

for this year's report. As a percentage of GDP, the measured unfunded obligation over the infinite horizon is the same as was estimated for last year's report, at 1.2 percent.

Uncertainty of the Projections

Significant uncertainty surrounds the intermediate assumptions. The Trustees utilize several methods to help illustrate that uncertainty. One approach is the use of low-cost (alternative I) and high-cost (alternative III) assumptions. Figure II.D6 shows the projected trust fund ratios for the combined OASI and DI Trust Funds under the intermediate, low-cost, and high-cost assumptions. The low-cost alternative reflects a set of assumptions that improves the projected financial status of the trust funds relative to the financial status under the intermediate set of assumptions. The low-cost alternative includes a higher ultimate total fertility rate, slower improvement in mortality, a higher real-wage differential, and lower unemployment. The high-cost alternative, in contrast, includes a lower ultimate total fertility rate, more rapid improvement in mortality, a lower real-wage differential, and higher unemployment. These alternatives are not intended to suggest that all parameters would be likely to differ from the intermediate values in the same direction, but are intended to illustrate the effect of clearly defined scenarios that are, on balance, very favorable or unfavorable for the program's financial status. The actual outcome for future costs is unlikely to be as extreme as either of the outcomes portrayed by the low- and high-cost projections. The method for constructing these low- and high-cost projections does not provide an estimate of the probability that actual experience will lie within or outside the range they define.

Figure II.D6.—Long-Range OASDI Trust Fund Ratios Under Alternative Assumptions
 [Assets as a percentage of annual cost]

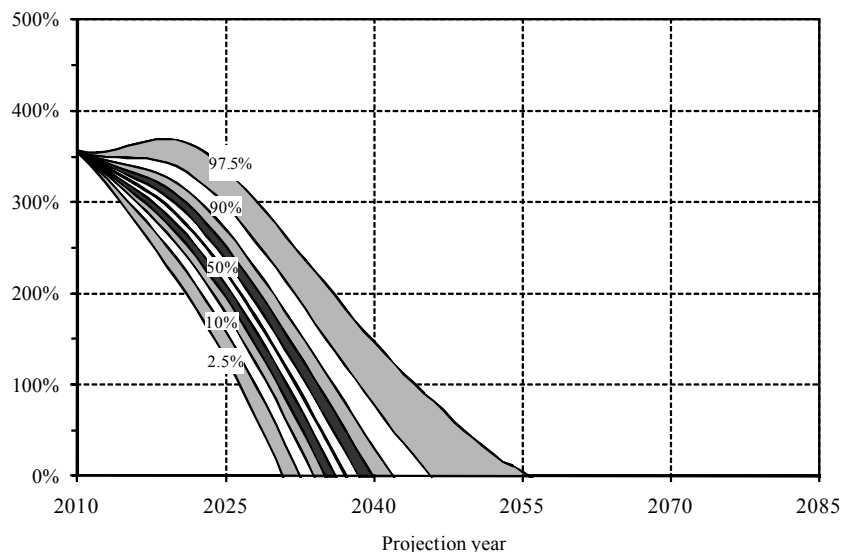


In Appendix D, this report also provides long-range sensitivity analysis for the OASDI program, by varying one parameter at a time. These estimates provide further illustrations of the uncertainty surrounding projections into the future, but do not provide any measure of the probability that future outcomes will fall within or outside the ranges shown.

A third approach that measures uncertainty uses stochastic simulations to develop a range of projections and provides estimates of the probability that future outcomes will fall within or outside a given range. The results of the stochastic simulations, discussed in more detail in Appendix E, suggest that trust fund exhaustion is highly probable before the end of the 75-year period (see figure II.D7).

The stochastic results suggest that outcomes as good as the low-cost alternative or as bad as the high-cost alternative are unlikely. However, the relationship between the stochastic results and the low- and high-cost alternatives may change as the methodology for the stochastic simulations is further developed. As noted in Appendix E, future improvements and refinements are expected to be more likely to expand rather than reduce the indicated range of uncertainty.

Figure II.D7.—Annual Trust Fund Ratios



Changes From Last Year's Report

The long-range OASDI actuarial deficit of 1.92 percent of taxable payroll for this year's report is smaller than the deficit of 2.00 percent of taxable payroll shown in last year's report under intermediate assumptions. Legislative changes, in particular the estimated effects of the Patient Protection and Affordable Care Act and the Health Care and Education Reconciliation Act of 2010, are the main reason for the decrease in the deficit. This effect for legislative changes is partially offset by the change in the valuation period. Finally, changes in several assumptions, methods, and recent data had largely offsetting effects. For example, the negative effects of lower historical and projected levels of death rates and near-term higher disability prevalence roughly offset the positive effects that resulted from updating the samples used to project future average benefit levels and the model used to project labor force participation rates. Also, the near-term negative effects on employment of the slightly deeper recession than assumed last year are offset by higher than expected real growth in the average earnings level. For a detailed description of the specific changes identified in table II.D2 below, see section IV.B7 on page 71.

**Table II.D2.—Reasons for Change in the 75-Year Actuarial Balance,
Based on Intermediate Assumptions**
[As a percentage of taxable payroll]

Item	OASI	DI	OASDI
Shown in last year's report:			
Income rate	12.08	1.93	14.02
Cost rate	13.76	2.25	16.02
Actuarial balance	-1.68	-.32	-2.00
Changes in actuarial balance due to changes in:			
Legislation / Regulation	+.12	+.02	+.14
Valuation period ^a	-.05	-.01	-.06
Demographic data and assumptions	-.05	.00	-.05
Economic data and assumptions	-.01	.00	.00
Disability assumptions	+.01	-.02	-.02
Methods and programmatic data	+.04	+.03	+.07
Total change in actuarial balance	+.06	+.02	+.08
Shown in this report:			
Actuarial balance	-1.62	-.30	-1.92
Income rate	12.09	1.92	14.01
Cost rate	13.71	2.22	15.93

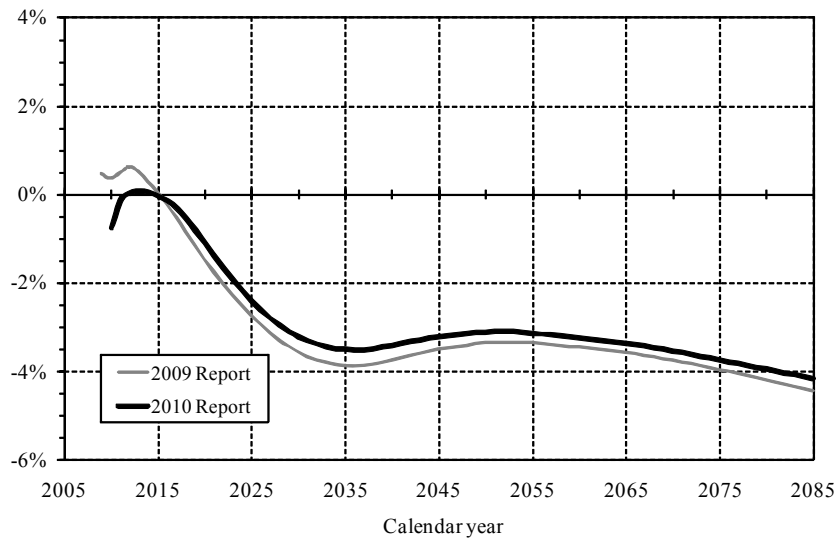
^a In changing from the valuation period of last year's report, which was 2009-83, to the valuation period of this report, 2010-84, the relatively large negative annual balance for 2084 is included. This change in the valuation period results in a larger long-range actuarial deficit. The fund balance at the end of 2009, i.e., at the beginning of the projection period, is included in the 75-year actuarial balance.

Note: Totals do not necessarily equal the sums of rounded components.

The open group unfunded obligation over the 75-year projection period has increased from \$5.3 trillion (present discounted value as of January 1, 2009) to \$5.4 trillion (present discounted value as of January 1, 2010). The measured unfunded obligation would be expected to increase by about \$0.4 trillion due to advancing the valuation date by 1 year and including the additional year 2084. Legislative changes, changes in methods, revisions in assumptions, and updated data decreased the measured unfunded obligation by about \$0.3 trillion.

This year's projections of annual balances (noninterest income minus cost) are lower than those in last year's report through 2015 and then become higher throughout the remainder of the 75-year projection period. See figure II.D8.

Figure II.D8.—OASDI Annual Balances: 2009 and 2010 Trustees Reports
[As a percentage of taxable payroll, under the intermediate assumptions]



E. CONCLUSION

Under current law, the cost of Social Security will generally increase faster than the program's income because of the aging of the baby-boom generation, continuing low fertility (compared to the baby-boom period), and increasing life expectancy. Based on the Trustees' best estimate, program cost will exceed tax income in 2010 and 2011 due to the economic recession and to an expected downward adjustment to 2010 income that corrects for excess payroll tax revenue credited to the Trust Funds in earlier years. Annual cost is projected to be less than tax income in 2012 through 2014, and then to exceed tax income beginning in 2015. Thereafter, annual deficits will increase generally through the remainder of the 75-year projection period. Social Security's combined trust funds are projected to allow full payment of scheduled benefits on a timely basis until the trust funds become exhausted in 2037. At that time, annual tax income to the trust funds is projected to equal about 78 percent of program cost. By 2084, annual tax income is projected to be about 75 percent as large as the annual cost of the OASDI program.

Separately, the OASI and DI funds are projected to have sufficient funds to pay full benefits on time until 2040 and 2018, respectively. Given that the DI fund is projected to become exhausted in 2018, some action will almost certainly be needed in the next few years. At a minimum, a reallocation of the payroll tax rate between OASI and DI would be necessary, as was done in 1994.

Over the full 75-year projection period, the actuarial deficit estimated for the combined trust funds is 1.92 percent of taxable payroll—0.08 percentage point smaller than the 2.00 percent deficit projected in last year's report. Solvency of the combined OASDI Trust Funds for the next 75 years could be restored under the intermediate assumptions if increases were made equivalent to immediately and permanently increasing the Social Security payroll tax from its current level of 12.40 percent (for employees and employers combined) to 14.24 percent. Alternatively, changes could be made that are equivalent to reducing scheduled benefits by about 12.0 percent. Other ways of reducing the deficit include transfers of general revenue or some combination of approaches.

If no substantial action is taken until the combined trust funds become exhausted in 2037, then changes necessary to make Social Security solvent over the next 75 years will be concentrated on fewer years and fewer generations:

- For example, payroll taxes could be raised to finance scheduled benefits fully in every year starting in 2037. In this case, the payroll tax would be increased to about 16.1 percent at the point of trust fund exhaustion in 2037 and continue rising generally thereafter, reaching about 16.7 percent in 2084.
- Similarly, benefits could be reduced to the level that is payable with scheduled tax rates in each year beginning in 2037. Under this scenario, scheduled benefits would be reduced 22 percent at the point of trust fund exhaustion in 2037, with reductions reaching 25 percent in 2084.

Either of these actions would eliminate the shortfall for the 75-year period as a whole by specifically eliminating annual deficits after trust fund exhaustion. Based on the assumption of continued increase in the average age of the population after the 75-year period (due to expected improvement in life expectancy), Social Security's annual cost will very likely continue to grow faster than scheduled tax revenue after 2084. As a result, ensuring solvency of the system beyond 2084 would likely require further changes beyond those expected to be needed for 2084.

The projected trust fund shortfalls should be addressed in a timely way so that necessary changes can be phased in gradually and workers can be given time to plan for them. Implementing changes sooner will allow the needed revenue increases or benefit reductions to be spread over more generations. Social Security plays a critical role in the lives of 54 million beneficiaries and 155 million covered workers and their families in 2010. With informed discussion, creative thinking, and timely legislative action, present and future Congresses and Presidents can ensure that Social Security continues to protect future generations.

For further information related to the contents of this report, see the following websites.

- www.socialsecurity.gov/oact/tr/2010/index.html
- www.cms.gov/ReportsTrustFunds/
- www.treas.gov/offices/economic-policy/social_security.shtml

OASDI AND SSI SNAPSHOT AND SSI MONTHLY STATISTICS

Each month, the Social Security Administration's Office of Retirement and Disability Policy posts key statistics about various aspects of the Supplemental Security Income (SSI) program at <http://www.socialsecurity.gov/policy>. The statistics include the number of people who receive benefits, eligibility category, and average monthly payment. This issue presents SSI data for September 2009–September 2010.

The Monthly Statistical Snapshot summarizes information about the Social Security and SSI programs and provides a summary table on the trust funds. Data for September 2010 are given on pages 100–101. Trust fund data for September 2010 are given on page 101. The more detailed SSI tables begin on page 102. Persons wanting detailed monthly OASDI information should visit the Office of the Actuary's Web site at <http://www.socialsecurity.gov/OACT/ProgData/beniesQuery.html>.

Monthly Statistical Snapshot

Table 1. Number of people receiving Social Security, Supplemental Security Income, or both

Table 2. Social Security benefits

Table 3. Supplemental Security Income recipients

Table 4. Operations of the Old-Age and Survivors Insurance and Disability Insurance Trust Funds

The most current edition of Tables 1–3 will always be available at http://www.socialsecurity.gov/policy/docs/quickfacts/stat_snapshot. The most current data for the trust funds (Table 4) are available at <http://www.socialsecurity.gov/OACT/ProgData/funds.html>.

Monthly Statistical Snapshot, September 2010

Table 1
Number of people receiving Social Security, Supplemental Security Income, or both, September 2010
(in thousands)

Type of beneficiary	Total	Social Security only	SSI only	Both Social Security and SSI
All beneficiaries	58,845	50,946	5,189	2,709
Aged 65 or older	38,046	35,999	895	1,151
Disabled, under age 65 ^a	13,164	7,312	4,294	1,558
Other ^b	7,635	7,635	...	...

SOURCE: Social Security Administration, Master Beneficiary Record, 100 percent data. Social Security Administration, Supplemental Security Record, 100 percent data.

NOTES: Data are for the end of the specified month. Only Social Security beneficiaries in current-payment status are included.

... = not applicable.

a. Includes children receiving SSI on the basis of their own disability.

b. Social Security beneficiaries who are neither aged nor disabled (for example, early retirees, young survivors).

CONTACT: Art Kahn (410) 965-0186 or ssi.monthly@ssa.gov for further information.

Table 2.
Social Security benefits, September 2010

Type of beneficiary	Beneficiaries		Total monthly benefits (millions of dollars)	Average monthly benefit (dollars)
	Number (thousands)	Percent		
All beneficiaries	53,656	100.0	57,531	1,072.20
Old-Age Insurance				
Retired workers	34,390	64.1	40,313	1,172.20
Spouses	2,325	4.3	1,344	578.10
Children	567	1.1	326	574.20
Survivors Insurance				
Widow(er)s and parents ^a	4,301	8.0	4,758	1,106.40
Widowed mothers and fathers ^b	157	0.3	133	848.20
Children	1,882	3.5	1,411	749.90
Disability Insurance				
Disabled workers	8,102	15.1	8,638	1,066.10
Spouses	160	0.3	46	286.90
Children	1,772	3.3	563	317.50

SOURCE: Social Security Administration, Master Beneficiary Record, 100 percent data.

NOTES: Data are for the end of the specified month. Only beneficiaries in current-payment status are included.

Some Social Security beneficiaries are entitled to more than one type of benefit. In most cases, they are dually entitled to a worker benefit and a higher spouse or widow(er) benefit. If both benefits are financed from the same trust fund, the beneficiary is usually counted only once in the statistics, as a retired-worker or a disabled-worker beneficiary, and the benefit amount recorded is the larger amount associated with the auxiliary benefit. If the benefits are paid from different trust funds the beneficiary is counted twice, and the respective benefit amounts are recorded for each type of benefit.

a. Includes nondisabled widow(er)s aged 60 or older, disabled widow(er)s aged 50 or older, and dependent parents of deceased workers aged 62 or older.

b. A widow(er) or surviving divorced parent caring for the entitled child of a deceased worker who is under age 16 or is disabled.

CONTACT: Hazel P. Jenkins (410) 965-0164 or oasdi.monthly@ssa.gov for further information.

Table 3.
Supplemental Security Income recipients, September 2010

Age	Recipients		Total payments ^a (millions of dollars)	Average monthly payment ^b (dollars)
	Number (thousands)	Percent		
All recipients	7,899	100.0	4,256	498.30
Under 18	1,235	15.6	774	594.20
18–64	4,617	58.4	2,652	514.60
65 or older	2,046	25.9	829	403.90

SOURCE: Social Security Administration, Supplemental Security Record, 100 percent data.

NOTE: Data are for the end of the specified month.

a. Includes retroactive payments.

b. Excludes retroactive payments.

CONTACT: Art Kahn (410) 965-0186 or ssi.monthly@ssa.gov for further information.

Table 4.
Operations of the Old-Age and Survivors Insurance and Disability Insurance Trust Funds,
September 2010 (in millions of dollars)

Component	OASI	DI	Combined OASI and DI
Receipts			
Total	44,544	7,607	52,151
Net contributions	44,435	7,546	51,981
Income from taxation of benefits	13	0	14
Net interest	95	61	156
Payments from the general fund	0	0	0
Expenditures			
Total	48,769	10,861	59,630
Benefit payments	48,438	10,584	59,022
Administrative expenses	331	227	608
Transfers to Railroad Retirement	0	0	0
Assets			
At start of month	2,402,602	190,199	2,592,801
Net increase during month	-4,225	-3,254	-7,479
At end of month	2,398,377	186,946	2,585,323

SOURCE: Data on the trust funds were accessed on October 28, 2010, on the Social Security Administration's Office of the Actuary's Web site: <http://www.socialsecurity.gov/OACT/ProgData/funds.html>.

NOTE: Totals may not equal the sum of the components because of rounding.

Supplemental Security Income, September 2009–September 2010

The SSI Monthly Statistics are also available at http://www.socialsecurity.gov/policy/docs/statcomps/ssi_monthly/index.html.

SSI Federally Administered Payments

Table 1. Recipients (by type of payment), total payments, and average monthly payment

Table 2. Recipients, by eligibility category and age

Table 3. Recipients of federal payment only, by eligibility category and age

Table 4. Recipients of federal payment and state supplementation, by eligibility category and age

Table 5. Recipients of state supplementation only, by eligibility category and age

Table 6. Total payments, by eligibility category, age, and source of payment

Table 7. Average monthly payment, by eligibility category, age, and source of payment

Awards of SSI Federally Administered Payments

Table 8. All awards, by eligibility category and age of awardee

Table 1.
Recipients (by type of payment), total payments, and average monthly payment,
September 2009–September 2010

Month	Number of recipients				Total payments ^a (thousands of dollars)	Average monthly payment ^b (dollars)
	Total	Federal payment only	Federal payment and state supplementation	State supplementation only		
2009						
September	7,691,602	5,337,606	2,090,610	263,386	4,182,914	497.50
October	7,682,338	5,330,233	2,088,580	263,525	4,113,205	499.40
November	7,721,905	5,368,216	2,099,323	254,366	4,170,583	498.10
December	7,676,686	5,337,340	2,085,539	253,807	4,120,127	498.80
2010						
January	7,705,071	5,358,655	2,092,282	254,134	4,085,073	498.70
February	7,739,526	5,386,683	2,098,273	254,570	4,128,360	496.70
March	7,776,667	5,417,319	2,105,179	254,169	4,274,831	498.30
April	7,774,363	5,415,628	2,104,004	254,731	4,184,114	499.50
May	7,800,015	5,435,751	2,109,071	255,193	4,205,003	498.60
June	7,837,400	5,464,724	2,116,937	255,739	4,269,596	497.50
July	7,831,046	5,460,051	2,114,890	256,105	4,190,076	499.20
August	7,892,141	5,507,862	2,127,986	256,293	4,311,454	498.90
September	7,898,515	5,513,288	2,128,504	256,723	4,256,062	498.30

SOURCE: Social Security Administration, Supplemental Security Record, 100 percent data.

NOTE: Data are for the end of the specified month.

a. Includes retroactive payments.

b. Excludes retroactive payments.

CONTACT: Art Kahn (410) 965-0186 or ssi.monthly@ssa.gov for further information.

SSI Federally Administered Payments

Table 2.
Recipients, by eligibility category and age, September 2009–September 2010

Month	Total	Eligibility category		Age		
		Aged	Blind and disabled	Under 18	18–64	65 or older
2009						
September	7,691,602	1,199,576	6,492,026	1,195,708	4,457,046	2,038,848
October	7,682,338	1,199,260	6,483,078	1,189,467	4,453,509	2,039,362
November	7,721,905	1,196,845	6,525,060	1,204,089	4,479,991	2,037,825
December	7,676,686	1,185,959	6,490,727	1,199,788	4,451,288	2,025,610
2010						
January	7,705,071	1,190,266	6,514,805	1,199,296	4,472,499	2,033,276
February	7,739,526	1,190,016	6,549,510	1,209,641	4,494,957	2,034,928
March	7,776,667	1,188,361	6,588,306	1,215,280	4,527,056	2,034,331
April	7,774,363	1,187,763	6,586,600	1,212,272	4,527,929	2,034,162
May	7,800,015	1,188,088	6,611,927	1,221,863	4,542,049	2,036,103
June	7,837,400	1,189,172	6,648,228	1,227,732	4,570,209	2,039,459
July	7,831,046	1,188,489	6,642,557	1,222,497	4,568,938	2,039,611
August	7,892,141	1,191,591	6,700,550	1,236,644	4,609,849	2,045,648
September	7,898,515	1,191,611	6,706,904	1,235,499	4,616,558	2,046,458

SOURCE: Social Security Administration, Supplemental Security Record, 100 percent data.

NOTE: Data are for the end of the specified month.

CONTACT: Art Kahn (410) 965-0186 or ssi.monthly@ssa.gov for further information.

Table 3.
Recipients of federal payment only, by eligibility category and age, September 2009–September 2010

Month	Total	Eligibility category		Age		
		Aged	Blind and disabled	Under 18	18–64	65 or older
2009						
September	5,337,606	603,879	4,733,727	954,863	3,251,286	1,131,457
October	5,330,233	603,483	4,726,750	949,858	3,248,892	1,131,483
November	5,368,216	604,365	4,763,851	961,696	3,272,730	1,133,790
December	5,337,340	598,193	4,739,147	958,456	3,252,098	1,126,786
2010						
January	5,358,655	601,117	4,757,538	957,892	3,268,823	1,131,940
February	5,386,683	600,988	4,785,695	966,712	3,287,084	1,132,887
March	5,417,319	599,878	4,817,441	971,340	3,313,675	1,132,304
April	5,415,628	599,330	4,816,298	968,783	3,315,068	1,131,777
May	5,435,751	599,282	4,836,469	976,745	3,326,507	1,132,499
June	5,464,724	599,370	4,865,354	981,762	3,349,104	1,133,858
July	5,460,051	598,923	4,861,128	977,452	3,348,671	1,133,928
August	5,507,862	600,387	4,907,475	988,805	3,381,935	1,137,122
September	5,513,288	600,397	4,912,891	987,846	3,387,950	1,137,492

SOURCE: Social Security Administration, Supplemental Security Record, 100 percent data.

NOTE: Data are for the end of the specified month.

CONTACT: Art Kahn (410) 965-0186 or ssi.monthly@ssa.gov for further information.

SSI Federally Administered Payments

Table 4.
Recipients of federal payment and state supplementation, by eligibility category and age,
September 2009–September 2010

Month	Total	Eligibility category		Age		
		Aged	Blind and disabled	Under 18	18–64	65 or older
2009						
September	2,090,610	505,832	1,584,778	239,266	1,074,273	777,071
October	2,088,580	506,003	1,582,577	238,030	1,072,970	777,580
November	2,099,323	507,214	1,592,109	240,914	1,078,682	779,727
December	2,085,539	502,433	1,583,106	239,746	1,071,361	774,432
2010						
January	2,092,282	504,173	1,588,109	239,873	1,075,186	777,223
February	2,098,273	504,005	1,594,268	241,413	1,079,151	777,709
March	2,105,179	503,752	1,601,427	242,466	1,084,747	777,966
April	2,104,004	503,713	1,600,291	241,939	1,083,803	778,262
May	2,109,071	503,992	1,605,079	243,614	1,086,242	779,215
June	2,116,937	504,818	1,612,119	244,450	1,091,621	780,866
July	2,114,890	504,667	1,610,223	243,521	1,090,373	780,996
August	2,127,986	506,063	1,621,923	246,376	1,098,125	783,485
September	2,128,504	506,017	1,622,487	246,130	1,098,554	783,820

SOURCE: Social Security Administration, Supplemental Security Record, 100 percent data.

NOTE: Data are for the end of the specified month.

CONTACT: Art Kahn (410) 965-0186 or ssi.monthly@ssa.gov for further information.

Table 5.
Recipients of state supplementation only, by eligibility category and age,
September 2009–September 2010

Month	Total	Eligibility category		Age		
		Aged	Blind and disabled	Under 18	18–64	65 or older
2009						
September	263,386	89,865	173,521	1,579	131,487	130,320
October	263,525	89,774	173,751	1,579	131,647	130,299
November	254,366	85,266	169,100	1,479	128,579	124,308
December	253,807	85,333	168,474	1,586	127,829	124,392
2010						
January	254,134	84,976	169,158	1,531	128,490	124,113
February	254,570	85,023	169,547	1,516	128,722	124,332
March	254,169	84,731	169,438	1,474	128,634	124,061
April	254,731	84,720	170,011	1,550	129,058	124,123
May	255,193	84,814	170,379	1,504	129,300	124,389
June	255,739	84,984	170,755	1,520	129,484	124,735
July	256,105	84,899	171,206	1,524	129,894	124,687
August	256,293	85,141	171,152	1,463	129,789	125,041
September	256,723	85,197	171,526	1,523	130,054	125,146

SOURCE: Social Security Administration, Supplemental Security Record, 100 percent data.

NOTE: Data are for the end of the specified month.

CONTACT: Art Kahn (410) 965-0186 or ssi.monthly@ssa.gov for further information.

SSI Federally Administered Payments

Table 6.
Total payments, by eligibility category, age, and source of payment, September 2009–September 2010
(in thousands of dollars)

Month	Total	Eligibility category		Age		
		Aged	Blind and disabled	Under 18	18–64	65 or older
<i>All sources</i>						
2009						
September	4,182,914	483,759	3,699,155	756,658	2,595,105	831,151
October	4,113,205	482,769	3,630,436	746,096	2,537,059	830,051
November	4,170,583	478,621	3,691,962	761,639	2,584,118	824,826
December	4,120,127	475,505	3,644,622	749,310	2,548,839	821,978
2010						
January	4,085,073	475,166	3,609,906	747,254	2,515,751	822,067
February	4,128,360	474,541	3,653,819	753,953	2,552,017	822,389
March	4,274,831	476,647	3,798,184	778,186	2,670,430	826,215
April	4,184,114	475,045	3,709,068	765,706	2,594,324	824,084
May	4,205,003	475,367	3,729,637	769,404	2,610,191	825,408
June	4,269,596	476,085	3,793,511	777,075	2,665,250	827,272
July	4,190,076	475,028	3,715,047	768,633	2,595,399	826,044
August	4,311,454	477,380	3,834,075	789,090	2,691,868	830,496
September	4,256,062	476,375	3,779,687	774,470	2,652,224	829,369
<i>Federal payments</i>						
2009						
September	3,857,447	396,737	3,460,709	742,811	2,416,630	698,005
October	3,791,682	395,942	3,395,740	732,647	2,361,874	697,160
November	3,859,618	397,861	3,461,757	748,119	2,411,145	700,355
December	3,812,757	395,498	3,417,259	736,024	2,378,352	698,381
2010						
January	3,778,554	395,121	3,383,433	734,090	2,346,108	698,357
February	3,819,297	394,452	3,424,845	740,633	2,380,203	698,461
March	3,960,039	396,317	3,563,722	764,484	2,493,708	701,847
April	3,874,717	395,074	3,479,644	752,347	2,422,234	700,136
May	3,894,414	395,283	3,499,131	755,935	2,437,215	701,264
June	3,955,592	395,870	3,559,722	763,468	2,489,337	702,787
July	3,880,991	394,995	3,485,995	755,300	2,423,830	701,861
August	3,996,408	396,847	3,599,561	775,338	2,515,592	705,477
September	3,943,345	396,051	3,547,294	760,966	2,477,787	704,592

(Continued)

SSI Federally Administered Payments

Table 6.

**Total payments, by eligibility category, age, and source of payment, September 2009–September 2010
(in thousands of dollars)—Continued**

Month	Total	Eligibility category		Age		
		Aged	Blind and disabled	Under 18	18–64	65 or older
State supplementation						
2009						
September	325,467	87,022	238,445	13,847	178,474	133,146
October	321,524	86,827	234,697	13,448	175,185	132,891
November	310,965	80,760	230,205	13,520	172,973	124,471
December	307,370	80,008	227,363	13,286	170,488	123,597
2010						
January	306,519	80,045	226,474	13,165	169,643	123,710
February	309,062	80,089	228,974	13,320	171,815	123,928
March	314,792	80,330	234,462	13,703	176,722	124,368
April	309,396	79,972	229,424	13,358	172,090	123,948
May	310,589	80,084	230,505	13,470	172,976	124,143
June	314,004	80,215	233,789	13,607	175,913	124,485
July	309,085	80,033	229,052	13,333	171,569	124,183
August	315,046	80,533	234,513	13,752	176,276	125,019
September	312,717	80,324	232,393	13,503	174,437	124,777

SOURCE: Social Security Administration, Supplemental Security Record, 100 percent data.

NOTE: Data are for the end of the specified month and include retroactive payments.

CONTACT: Art Kahn (410) 965-0186 or ssi.monthly@ssa.gov for further information.

SSI Federally Administered Payments

Table 7.
Average monthly payment, by eligibility category, age, and source of payment,
September 2009–September 2010 (in dollars)

Month	Total	Eligibility category		Age		
		Aged	Blind and disabled	Under 18	18–64	65 or older
All sources						
2009						
September	497.50	401.10	515.30	592.50	514.20	405.40
October	499.40	401.30	517.50	600.70	515.30	405.60
November	498.10	397.70	516.50	597.80	514.70	402.60
December	498.80	399.10	517.00	593.10	516.50	404.00
2010						
January	498.70	397.90	517.10	599.90	515.10	403.00
February	496.70	396.80	514.80	592.90	513.40	402.10
March	498.30	398.20	516.40	596.60	514.70	403.20
April	499.50	398.50	517.70	601.60	515.30	403.60
May	498.60	398.50	516.60	596.90	514.80	403.60
June	497.50	398.30	515.30	592.40	514.10	403.60
July	499.20	398.50	517.20	600.50	514.80	403.70
August	498.90	398.60	516.80	598.20	514.60	403.80
September	498.30	398.60	516.00	594.20	514.60	403.90
Federal payments						
2009						
September	473.80	355.80	494.60	582.70	492.30	363.90
October	475.70	355.90	496.80	591.00	493.40	364.10
November	475.60	356.20	496.50	588.20	493.40	364.30
December	476.30	357.90	497.00	583.60	495.30	365.80
2010						
January	476.30	356.50	497.20	590.40	494.00	364.80
February	474.40	355.40	494.90	583.40	492.40	363.90
March	476.10	356.70	496.60	587.20	493.70	365.00
April	477.20	357.00	497.90	592.20	494.30	365.40
May	476.40	357.00	496.90	587.40	493.90	365.50
June	475.40	356.90	495.60	583.00	493.20	365.40
July	477.10	357.00	497.60	591.10	494.00	365.50
August	476.80	357.10	497.20	588.70	493.80	365.60
September	476.20	357.00	496.40	584.80	493.80	365.70

(Continued)

SSI Federally Administered Payments

Table 7.
Average monthly payment, by eligibility category, age, and source of payment,
September 2009–September 2010 (in dollars)—Continued

Month	Total	Eligibility category		Age		
		Aged	Blind and disabled	Under 18	18–64	65 or older
State supplementation						
2009						
September	130.20	144.40	125.40	52.30	134.60	145.10
October	130.30	144.50	125.50	52.30	134.70	145.10
November	124.90	134.80	121.60	51.30	131.30	136.20
December	125.00	135.00	121.60	51.30	131.30	136.30
2010						
January	124.80	134.80	121.50	51.20	131.10	136.10
February	124.60	134.60	121.20	51.10	130.90	136.00
March	124.70	134.70	121.30	51.10	130.90	136.10
April	124.70	134.70	121.30	51.10	130.90	136.10
May	124.50	134.70	121.20	51.00	130.80	136.10
June	124.40	134.70	121.00	50.90	130.60	136.00
July	124.40	134.70	121.00	51.00	130.60	136.00
August	124.30	134.70	120.90	50.90	130.50	136.00
September	124.30	134.70	120.90	50.80	130.40	136.10

SOURCE: Social Security Administration, Supplemental Security Record, 100 percent data.

NOTE: Data are for the end of the specified month and exclude retroactive payments.

CONTACT: Art Kahn (410) 965-0186 or ssi.monthly@ssa.gov for further information.

Awards of SSI Federally Administered Payments

Table 8.
All awards, by eligibility category and age of awardee, September 2009–September 2010

Month	Total	Eligibility category		Age		
		Aged	Blind and disabled	Under 18	18–64	65 or older
2009						
September	97,650	9,128	88,522	19,059	69,326	9,265
October	79,584	8,969	70,615	15,177	55,332	9,075
November	93,329	8,918	84,411	18,226	66,030	9,073
December	77,868	7,941	69,927	15,163	54,632	8,073
2010						
January	70,930	7,739	63,191	13,687	49,383	7,860
February	78,883	8,226	70,657	15,120	55,387	8,376
March	101,179	8,381	92,798	20,342	72,294	8,543
April	84,899	9,216	75,683	16,356	59,184	9,359
May	84,101	8,872	75,229	16,089	59,007	9,005
June	96,902	8,568	88,334	19,345	68,835	8,722
July	82,460	9,021	73,439	16,520	56,798	9,142
August ^a	101,404	9,529	91,875	19,766	71,954	9,684
September ^a	86,089	9,353	76,736	16,467	60,145	9,477

SOURCE: Social Security Administration, Supplemental Security Record, 100 percent data.

NOTE: Data are for all awards made during the specified month.

a. Preliminary data. In the first 2 months after their release, numbers may be adjusted to reflect returned checks.

CONTACT: Art Kahn (410) 965-0186 or ssi.monthly@ssa.gov for further information.

PERSPECTIVES—PAPER SUBMISSION GUIDELINES

The *Social Security Bulletin* is the quarterly research journal of the Social Security Administration. It has a diverse readership of policymakers, government officials, academics, graduate and undergraduate students, business people, and other interested parties.

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- consider the uncertainties that individuals and households face in preparing for and during retirement and the tools available to manage such uncertainties; and
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OASDI and SSI Program Rates and Limits, 2011

Old-Age, Survivors, and Disability Insurance

Tax Rates for Employers and Employees, Each ^a (percent)	
Social Security	
Old-Age and Survivors Insurance	5.30
Disability Insurance	<u>0.90</u>
Subtotal, Social Security	6.20
Medicare (Hospital Insurance)	<u>1.45</u>
Total	7.65
Maximum Taxable Earnings (dollars)	
Social Security	106,800
Medicare (Hospital Insurance)	No limit
Earnings Required for Work Credits (dollars)	
One Work Credit (One Quarter of Coverage)	1,120
Maximum of Four Credits a Year	4,480
Earnings Test Annual Exempt Amount (dollars)	
Under Full Retirement Age for Entire Year	14,160
For Months Before Reaching Full Retirement Age in Given Year	37,680
Beginning with Month Reaching Full Retirement Age	No limit
Maximum Monthly Social Security Benefit for Workers Retiring at Full Retirement Age (dollars)	
	2,366
Full Retirement Age	66
Cost-of-Living Adjustment (percent)	0.0
a. Self-employed persons pay a total of 15.3 percent—10.6 percent for OASI, 1.8 percent for DI, and 2.9 percent for Medicare.	

Supplemental Security Income

Monthly Federal Payment Standard (dollars)	
Individual	674
Couple	1,011
Cost-of-Living Adjustment (percent)	0.0
Resource Limits (dollars)	
Individual	2,000
Couple	3,000
Monthly Income Exclusions (dollars)	
Earned Income ^a	65
Unearned Income	20
Substantial Gainful Activity (SGA) Level for the Nonblind Disabled (dollars)	
	1,000
a. The earned income exclusion consists of the first \$65 of monthly earnings, plus one-half of remaining earnings.	

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Washington, DC 20254

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