QUARTERLY NEWSLETTER

INSIDE

University of **Michigan**
Retirement
Research
Center

DIRECTOR'S CORNER *John Laitner*

This summer, the Social Security Retirement Research Consortium marks a milestone of ten years in existence and will host its 10th annual conference. Clearly, as a mechanism for drawing in new scholars to the study of Social Security and retirement and for generating a wide range of policy relevant research, the RRC has been a success. The popularity of the annual conference has grown as well. This issue of the newsletter contains the current version of the agenda. As always, there will be presentations, discussion, and audience question and answer. Peter Orszag, Director of the CBO, will deliver a luncheon address.

This year's conference will focus on Determinants of Retirement Security. Measuring well-being in retirement has been a long-standing goal of the Health and Retirement Study (HRS). The HRS has a wealth of data on lifetime earnings (including linked SSA earning records), pensions (including pension provider links—supported by SSA), and assets. In recent years it has been expanded to include data on consumption. The Consumption and Activities Mail Survey (CAMS) data are collected through a mail survey, and SSA has been a prime supporter of this effort. MRRC researchers Michael Hurd and Susann Rohwedder have been at the forefront of helping to collect the CAMS data and have been using them for the past few years in a series of MRRC papers. Hurd and Rohwedder have argued that consumption is a much more reliable indicator of retiree well-being than is income. This issue highlights related work by these authors.

Hope to see you in August.

ADEQUACY OF RESOURCES & RETURNS-TO-SCALE IN RETIREMENT

By Michael D. Hurd and Susann Rohwedder

A common metric for retirement well-being is the income replacement rate, the amount of retirement income expressed as a percentage of preretirement income. Some fixed fraction, such as 80 percent, is often put forward as the amount needed to ensure a comfortable retirement. In prior work, we have argued that it makes more sense to consider consumption in retirement as an indicator of adequacy of resources. This is primarily because retirees can spend out of their wealth and other resources. Our earlier work considered all sources of wealth that could potentially support the path of consumption from the beginning of retirement to the end of life (Hurd and Rohwedder, 2006). In that paper, we argued that a more informative measure of resource adequacy is "necessary" wealth, or the minimum level of wealth necessary to carry out a life-cycle consumption plan. This measure reflects potential adjustments to a household's consumption that would prevent it from running out of wealth late in life.

Another important consideration is the fact that, among couples, a substantial fraction of the total retirement years will be spent by the surviving spouse living as a single person. The old saying that "two can live as cheaply as one" is a concept economists refer to as "returns-to-scale." It refers to the ability of a couple to spend less than twice what a single spends to achieve the same level of well-being. Accurately quantifying this concept has important policy implications: to the extent that singles need less than couples to maintain the same standard of living, assessments of the adequacy of resources that make no adjustment for widowing will misstate economic preparation. We estimate returns-to-scale parameters in spending by older households, using data from the Consumption and Activities Mail Survey (CAMS) and the Health and Retirement Study (HRS) and apply these to assessments of adequacy of retirement resources. This *research brief* summarizes this work.

WHAT ARE RETURNS-TO-SCALE?

Returns-to-scale arise in several ways. For example, a couple may share a car or other good; meals require about the same amount of work and cost for two as one and may involve less waste. Returns-to-scale can vary between complete and none. If the couple spends the same amount as a single yet each spouse achieves the same level of well-being as the single, returns-to-scale are complete, and, indeed, two can live as cheaply as one. If the couple requires twice the spending of a single for each to achieve the same well-being, there are no

returns-to-scale. Policymakers often use a returns-to-scale parameter. If there are no returns-to-scale, the parameter is 2.0: a couple requires twice the spending to achieve the level of well-being of a single person, and consumption per person is half that of the couple. If there are complete returns-to-scale, the returns-to-scale parameter is 1.0, and consumption per person is the same as consumption by the couple.

Estimates of returns-to-scale have implications for Social Security and other government programs that define their benefits in relation to the poverty line. For example, Social Security benefits of a widow amount to two-thirds of the benefit that the couple was receiving prior to the husband's death. The implicit returns-to-scale parameter is 1.5; that is, to achieve the same level of well-being as a single person, a couple is deemed to require 1.5 times that person's income. However, the poverty line implicitly defines the returns-to-scale parameter to be 1.26. As a consequence, a couple whose only income is Social Security benefits will experience a decline in income at widowing that is greater than the decline in the poverty line. Our results provide estimates of realistic returns-to-scale parameters to use in the design of government programs.

The present study focuses on returns-to-scale among older couples, comparing their total spending as a couple with the spending of the widowed spouse. The objective of the couple is to choose consumption during retirement before and after widowing to maximize the sum of the utility of the couple and of the widow. In this context, an important determinant of consumption is mortality risk, which we account for in this work.

ESTIMATES OF RETURNS-TO-SCALE

We find a median drop in spending at widowing of about 25 percent. Alternative estimates of returns-to-scale based on the raw data come from the differential drop in spending observed among widowed households and simultaneous drops in spending among households where marital status and household size did not change. We consider two such control groups: (a) single households living alone; and (b) couple households living alone. The rationale for taking the differential is that spending might have dropped even in the absence of widowing and we want to identify that portion of the drop in spending that is due to widowing. We find spending changes for singles of about 8 percent. Differencing with the drop observed among widowed households, we find that widowing appears to lead to a drop in spending of about 16 percent. For couples living alone we find declines in spending of 3.5 percent so that the differential drop for widowed households is 21 percent.

CONSUMPTION-BASED ASSESSMENTS OF ADEQUACY

In this work, we propose a consumption-based replacement rate as a measure of the adequacy of retirement resources. We observe the resources at retirement of a single person. We ask: can the resources support the projected consumption path? The consumption path is anchored at the initial post-retirement consumption level and follows the path given by the slopes of consumption paths that we have estimated from the CAMS panel. If the consumption path cannot be supported by the economic resources, we find the initial level of consumption that would permit the person to follow the life-cycle path. The consumption replacement rate is the ratio of the affordable consumption to the actual consumption. If the replacement rate is greater than one, economic resources are more than sufficient to finance the actual consumption path. If it is less than one, there is a shortfall in resources.

Because lifetime is uncertain, and wealth is not typically annuitized, we also ask whether the observed initial consumption level permits the person to follow the lifecycle path with a high degree of probability. Here the uncertainty is length of life, so the question is equivalent to finding whether the resources will sustain the path until advanced old age where the probability of survival is very small. For couples the basic method is similar. The couple will follow the consumption path as long as both spouses survive, and then the surviving spouse will switch to the consumption path of a single person. The shape of the single's path is estimated as described above, but the level will depend on returns-to-scale in consumption by the couple. At the death of the first spouse, the surviving spouse reduces consumption to the level specified by the returns-to-scale parameter. Knowing the consumption path of the surviving spouse, we find the expected present value of consumption for the lifetime of the couple and the surviving spouse. We also determine the fraction of households that can finance their expected consumption path with, say, 95% probability, and by how much a household would have to adjust consumption to keep the chances of running out of wealth towards the end of the life cycle reasonably small.

RESULTS

Our individual-level metric for adequate preparation is based on the following concept.

By how much does the household have to adjust initial consumption compared with actual initial consumption to keep the probability of running out of wealth at the end of life below a desired threshold?

We set our adjustment threshold to –15%. That is, in a particular simulation, someone is adequately prepared if he can afford initial consumption that is at least 85% of actual initial consumption. Overall we say that the individual is adequately prepared if the chances are 95% or greater that he can afford this initial adjusted level of consumption. For couples we mean the consumption by the couple as long as both spouses survive and the subsequent consumption by the survivor.

Among singles, consumption could be increased on average at all education levels. For example, among those with less than a high school education, average actual initial consumption is $19,100 whereas average affordable consumption is $23,000. At the individual level actual initial consumption is generally consistent with the available resources - 74 percent are adequately prepared according to our definition. However, just a little more than half of those in the lowest education band are adequately prepared.

We have chosen a required reduction of initial consumption by 15 percent or more to signal inadequate preparedness. We have tested the sensitivity of our results with respect to these cut off points. The results are surprisingly insensitive to these definitions, especially with respect to the cut-off for the probability of having to reduce consumption. The reason is that most households either fall substantially short of the thresholds of adequacy or they exceed them by a large margin.

Our baseline simulations for couples use the returns-to-scale parameter implicit in the poverty line; that is, a couple needs 26 percent more than a single person to achieve the same level of well-being, which implies that widows or widowers will consume 79.4 percent as much as the couple did prior to widowing. We actually observed in the data a median drop of 21.1 percent which is not materially different from the drop implied by the poverty line. The average affordable consumption is $98,500, yet average initial consumption is just $43,000. Thus on average couples could increase their consumption substantially. Even the median of the individual ratios of affordable consumption to actual consumption is 1.84. Although there is a gradient by education level, among those lacking high school graduation, the median of the ratio of affordable to actual consumption is 1.55.

For married persons, about 87 percent are adequately prepared, and females and males are about equally likely to be prepared. As with singles our overall results are not sensitive to the cut-off points we have used in our definitions of adequate preparation. When we run these analyses using different values of the returns-to-scale parameter, we find that the fraction of couples adequately prepared for retirement is not very sensitive to the amount of returns-to-scale.

CONCLUSION

This work takes a novel approach to estimating returns-to-scale in household spending by using the event of widowing for identification. From raw data, we find drops in spending from 16 to 25 percent at widowing, which is close to the returns-to-scale implied by the difference in the poverty lines for couples and singles. From model-based estimations we found the importance of accounting for uncertainty of survival.

Using consumption-based replacement rates, we assess the adequacy of financial preparation for retirement of households shortly after retirement. We conduct simulations for several different values of the returns-to-scale parameter. Results were not very sensitive to this parameter, because most couples are well prepared for retirement in that their retirement resources exceed what they need to maintain their consumption path into advanced old age.

References

Hurd, M. and Rohwedder, S. "Alternative Measures of Replacement Rates" MRRC Working Paper WP 2006-132.

This *Research Brief* is based on MRRC Working Paper WP 2008-174. Visit our website to view the full paper.

Michael Hurd is Director of the RAND Center for the Study of Aging. Susann Rohwedder is an Economist at RAND.

WHO NEEDS MORE STEADY RETIREMENT INCOME--

AND WHAT COULD BE DONE ABOUT IT?

On June 10, MRRC researcher Olivia S. Mitchell participated in a conference at the National Press Club sponsored by the Retirement Security Project. The conference topic was "The Automatic Revolution: Changing How America Saves." Dr. Mitchell's presentation focused on retirement system payouts and was titled "Who Needs More Steady Retirement Income and What Could Be Done About It?"

She began by offering the definition of a payout annuity as a mechanism for converting a lump sum of money into periodic payments that can last a specified period of time or until death. Annuities help to protect individuals against the possibility of outliving their retirement assets. They may be especially valuable to risk-averse retirees who have a high degree of uncertainty about their longevity.

The value of annuities depends on a host of factors. In weighing the potential value of annuitizing, the individual must weigh the cost of the premium against her expected longevity. She must consider her need and/or desire for larger amounts of cash on hand in or to be able, for example, to leave a bequest or to pay for long-term care. Other considerations include her other wealth holdings as well as the tax status of the annuity benefits.

Given all of the potential benefits of annuities, it is somewhat puzzling that rates of private annuitization in the US are so low. Dr. Mitchell suggested that there are reasons for policymakers to be concerned about this, but also reasons that it may not be so worrisome. For example, Social Security benefits represent more than half of overall retirement income for the majority of the retired population. Perhaps these resources are adequate for retirement consumption. Also, home ownership is widespread and represents de facto annuitized consumption. Medicare and Medicaid cover most of retiree medical costs. Lastly, it seems that many people have a desire to keep their assets liquid.

On the other hand, policymakers should be concerned about low rates of annuitization, in that looming Social Security and Medicare/Medicaid insolvency could un-

dermine these systems' ability to make good on future retirement promises. Home values are in decline and reverse mortgages, as a means of annuitizing housing wealth, are not widely utilized. In addition, there are issues within the insurance market. Annuity products are complex and hard for people to understand. For those who do take advantage of these products, there is the potential for adverse selection. Indeed, Figure 1 shows that those who do purchase annuities are likely to be much longer-lived than those who do not.

Finally, Mitchell acknowledged that there is a problem with poor information. International research shows that many people have difficulty making a good guess at their own survival probabilities. Even those who are in their 60s make bad estimates overall. Men at this age underestimate their life expectancy by an average of 2.83 years, women by 4.62 years. So what is the practical upshot? To be attractive to potential buyers, annuity products must be designed to:

1. Permit partial annuitization. This would allow additional liquidity for those need ing home care or long-term care or for those who desire to leave a bequest;

2. Be tax sensible. Currently, taxes on annuity benefits rise once the retiree exceeds her life expectancy, which is unlikely to be a good time to raise her tax rates;

3. Integrate with means-tested benefits. For instance, people with steady incomes – even if they are low – during retirement may have a harder time qualifying for Medicaid and subsidized Medicare Part D benefits;

4. Permit a retiree facing a severe health shock to scale up the benefits to cover in-home or long-term care.

In summary, according to Dr. Mitchell, there is much more work to be done to better understand the process of annuitization in the US, and much more that could be done to educate the public about the potential benefits and pitfalls of protection against outliving one's resources. Related to the latter, there is beginning to be discussion about whether federal insurance regulation of annuity providers would meet consumer needs better than the current piece-meal state-level regulation. A review of the international

annuity scene suggests that the US annuity market may be behind the curve. For instance, in the UK and Germany, mandatory deferred annuitization is required (by age 75 and 85, respectively), and Singapore has recently announced it will implement mandatory deferred annuity as well. And Chile and Mexico have devised an on-line bidding process for retirees to get competitive bids for lifetime payout products.

Olivia S. Mitchell is is the International Foundation of Employee Benefit Plans Professor of Insurance and Risk Management and the Executive Director of the Pension Research Council at the Wharton School of the University of Pennsylvania.

Figure 1. Survival Patterns Differ: Population vs. Annuitants
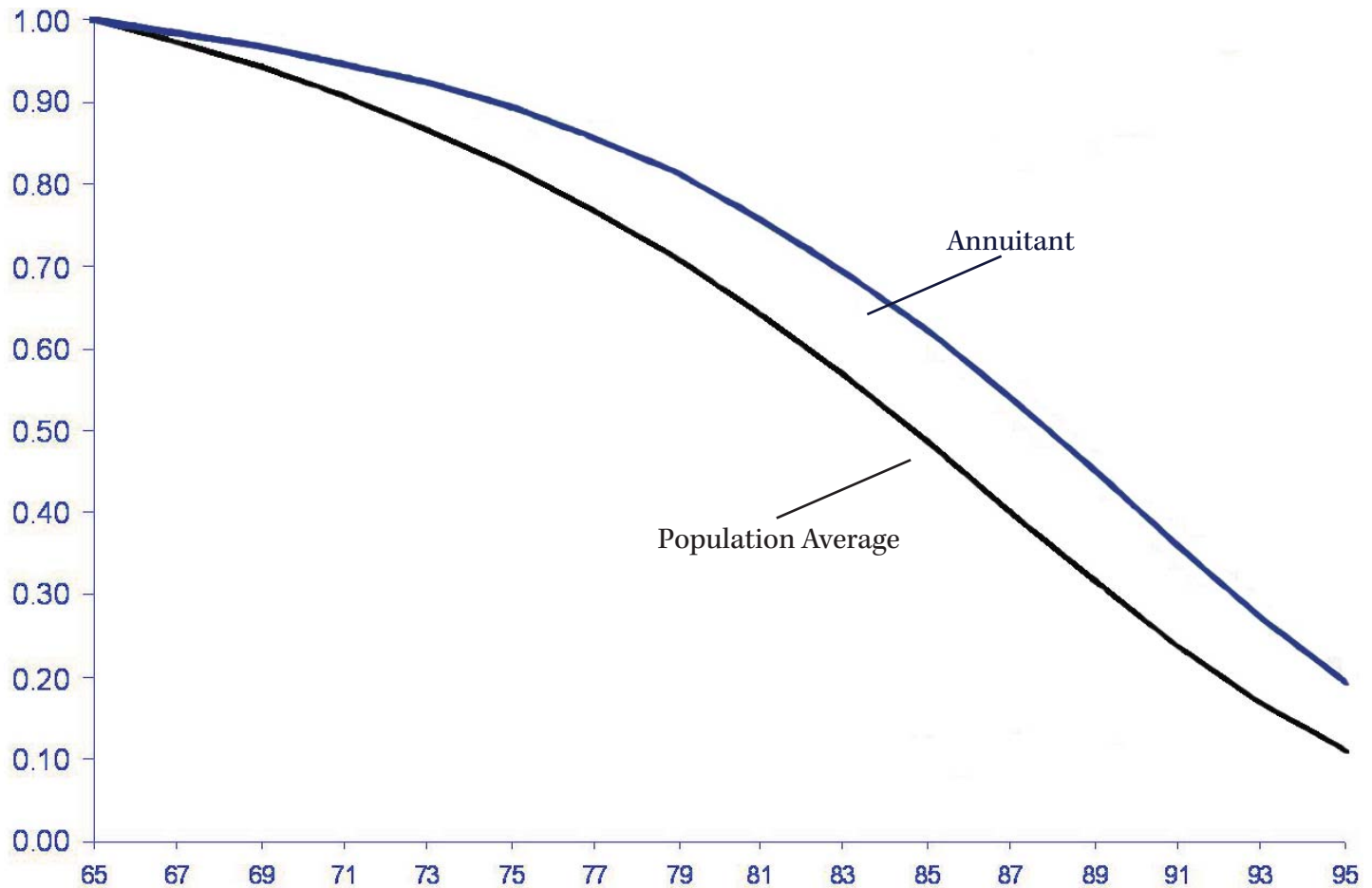
Source: T Mitchell, O.S. (2002), 'Developments in Decumulation: The Role of Annuity Products in Financing Retirement', in A. Auerbach and H. Herrman (eds), *Ageing, Financial Markets and Monetary Policy*, Berlin: Springer-Verlag, 97–125.

JASON FICHTNER NAMED ACTING DEPUTY COMMISSIONER OF SOCIAL SECURITY

In May, SSA Commissioner Michael Astrue announced that Jason Fichtner was appointed by President Bush as Acting Deputy Commissioner of Social Security. Since August 2007, Dr. Fichtner has served as Associate Commissioner for Retirement Policy in the Office of Retirement and Disability Policy. Quoting from the Commissioner's address, "In that position, Dr. Fichtner has been instrumental in the development and execution of economic policy for the agency. During his time at Social Security, he also has been a leader in our financial literacy effort to better educate people on the importance of retirement planning. In addition, since the departure of Andrew Biggs in February, Dr. Fichtner has served as the Acting Secretary to the Social Security Board of Trustees. Dr. Fichtner is a fine individual with keen insight into social and economic trends and a passion for the work of this agency. I look forward to working closely with him and seeking his counsel on some of the challenging issues we face."

We join the Commissioner in welcoming Dr. Fichtner in his new role as Acting Deputy Commissioner of Social Security.

Determinants of Retirement Security
Retirement Research Consortium Tenth Annual Conference
National Press Club, Washington, DC
Thursday, August 7, 2008

8:00-8:30   **Registration and Coffee**

8:30-8:45   **Welcoming Remarks**
                   Morning Session Chair: Alicia H. Munnell (Boston College)

8:45-10:15   **Panel 1: Impact of Pre-Retirement Patterns on Retirement Income**

                   The Impact of Changing Earnings Volatility on Retirement Wealth
                   Austin Nichols, Melissa Favreault, and Seth Zimmerman (Urban Institute)
                   Discussant: John Laitner (University of Michigan)

                   Marital Histories and Economic Well-Being
                   Julie Zissimopoulos, Amy J. Rauer, and Benjamin Karney (RAND)
                   Discussant: Joseph Quinn (Boston College)

                   The Liquification and Mid-Life Consumption of Retirement Assets: Evidence from 401(k) Loans
                   James Choi (Yale University), David Laibson and Brigitte Madrian (Harvard University)
                   Discussant: Annika Sundén (Swedish Social Insurance Agency)

10:15-10:30   Break

10:30-12:00   **Panel 2: The Timing of Retirement**

                   Who Determines When You Retire? Peer Effects and Retirement
                   John Chalmers, Woodrow Johnson, and Jonathan Reuter (University of Oregon)
                   Discussant: Andrew Biggs (American Enterprise Institute)

                   Early Social Security Claiming and Cognitive Resources
                   Adeline Delavande (RAND) and Robert J. Willis (University of Michigan)
                   Discussant: Gary Burtless (The Brookings Institution)

                   The Impact of Local Labor Market Conditions on Retirement Transitions
                   Leora Friedberg (University of Virginia), Michael Owyang (Federal Reserve Bank of St. Louis),
                   and Anthony Webb (Boston College)
                   Discussant: Till von Wachter (Columbia University)

12:00   **Box Lunch**

12:15-12:45   **Luncheon Speaker**
                   Peter Orszag (Director, Congressional Budget Office)

                   Afternoon Session Chair: David A. Wise (NBER and Harvard University)

12:45-2:15   **Panel 3: Asset Allocation**

                   The Efficiency of Pension Plan Investment Menus: Investment Choices in Defined Contribution Pensions
                   Olivia S. Mitchell and Ning Tang (University of Pennsylvania)
                   Discussant: Richard Kopcke (Boston College)

Demographic Trends, Housing Equity, and the Financial Security of Future Retirees
James Poterba (MIT), Steven Venti (Dartmouth College), and David Wise (NBER and Harvard University)
Discussant: Todd Sinai (University of Pennsylvania)

The Housing Bubble and Retirement Security
Alicia H. Munnell and Mauricio Soto (Boston College)
Discussant: Jeffrey Brown (University of Illinois)

2:15-3:45 **Panel 4: Adequacy of Retirement Income**

Are All Americans Saving Adequately for Retirement?
John Karl Scholz and Ananth Seshadri (University of Wisconsin)
Discussant: Brigitte Madrian (Harvard University)

Economic Well-Being and Health Care Costs among the Near-Aged and Retired
Gary Burtless (The Brookings Institution)
Discussant: Marilyn Moon (American Institutes for Research)

The Taxation of Social Security Benefits as an Approach to Means-Testing
Jeffrey Liebman (Harvard University)
Discussant: Eric Toder (Urban Institute)

3:45-4:00 **Break**

4:00-5:30 **Panel 5: Consumption in Retirement**

Do Health Shocks Reduce Consumption in Retirement?
Barbara A. Butrica, Richard W. Johnson, and Gordon B.T. Mermin (Urban Institute)
Discussant: Paul Van de Water (National Academy of Social Insurance)

Adequacy of Economic Resources in Retirement: Model-Based Estimations
Michael Hurd and Susann Rohwedder (RAND)
Discussant: Jeffrey Liebman (Harvard University)

Time, Expenditure, and Retirement Decisions
Mark Aguiar (University of Rochester) and Erik Hurst (University of Chicago)
Discussant: Leora Friedberg (University of Virginia)

5:30 **Reception**

Friday, August 8, 2008

8:00-8:15 **Registration and Coffee**

Welcoming Remarks
Morning Session Chair: John Laitner (University of Michigan)

8:15-9:45 **Panel 6: Sandell Scholars**

Sources of Support for Pension Privatization: The U.S. in Comparative Perspective
Michelle Dion (Georgia Institute of Technology) and Andrew Roberts (Northwestern University)

Discussant: Kent Weaver (Georgetown University)

The Long-Term Effects of the Divorce Revolution: Health, Wealth, and Labor Supply
Kristin Mammen (Barnard College)
Discussant: Kathleen McGarry (Dartmouth College)

Risky Pensions and Household Savings over the Life Cycle
David Love (Williams College) and Paul Smith (Federal Reserve Board)
Discussant: Michael Orszag (Watson Wyatt)

9:45-10:00	**Break**

10:00-11:30   **Panel 7: Program Interactions**

The Distributional and Incentive Effects of the Windfall Elimination Provision (WEP) and the Government Pension Offset (GPO)
Jeffrey Brown and Scott Weisbenner (University of Illinois)
Discussant: Robert Clark (North Carolina State University)

Effects of Dual-Eligible Medicaid Spending on Health Outcomes and Service Use
Melissa Boyle and Margaret Czervionke (College of the Holy Cross) and Joanna Lahey (Texas A&M University)
Discussant: Norma Coe (Tilburg University)

Interactions Between Veteran's Disability, OASDI and SSI
David Autor (MIT) and Mark Duggan (University of Maryland)
Discussant: Melissa Boyle (College of the Holy Cross)

11:30   **Box Lunch**

11:45-12:15   **Luncheon Panel: The Future of Medicare**
Presenter: Henry Aaron (The Brookings Institution)
Discussants: Marilyn Moon (The American Institutes for Research) and
Gail Wilensky (Project Hope)

12:15-1:45   **Panel 8: Safety Net for Older Workers**

Economic Hardship in the Years Preceding Social Security and Medicare Eligibility
Richard Johnson and Gordon B.T. Mermin (Urban Institute)
Discussant: Barbara Bovbjerg (Government Accountability Office)

The Employment Effects of Changing Social Security Disability Rolls Over the Past 25 Years
Till von Wachter (Columbia University)
Discussant: David Autor (MIT)

How Do Low-Income Families Think About Retirement?
Helen Levy and Kristin S. Seefeldt (University of Michigan)
Discussant: Steven Sass (Boston College)

1:45   **Closing Remarks**
Alicia H. Munnell (Boston College)

University of Michigan
Retirement
Research
Center

University of **Michigan**
Retirement
Research
Center

Institute for Social Research
426 Thompson Street, Room 3026
Ann Arbor, MI 48104-2321

MARK YOUR
CALENDARS

For the 9th Annual Conference of the
Retirement Research Consortium

August 7th and 8th
At the National Press Club in Washington D.C.

For more information visit our website
http://mrrc.isr.umich.edu