IMPROVING RETIREMENT SECURITY IN THE UNITED STATES

A DISSERTATION PRESENTED

BY

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ABSTRACT OF DISSERTATION

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The public media, surveys of workers and the general public have indicated increasing concern with retirement security in the face of lengthening life expectancies, the costs of retirement living, and anxieties over the reported insufficiency of retirement savings balances to fund a decent retirement.

The major questions of this dissertation are, first, whether the major parts of the United States retirement income security system, namely Social Security and the private pension system, are currently providing sufficient retirement security for all retirees? And second, how could this national system be reformed, if necessary, to provide greater retirement income security?

Because the problem of elderly security is an international one, the United States retirement income security system is compared to those of some of the other economically advanced countries of the OECD (Organization for Economic Cooperation and Development), and more particularly, France, Sweden and Japan. An assessment of the contrasting design elements and retirement income security outcomes is made.

Recommendations for reform of the United States system are offered which are based on an appraisal of the peculiar strengths and weaknesses of the United States system as well as on any promising design elements of the other examined national systems that might be adaptable to the United States.
ACKNOWLEDGEMENTS

DISSERTATION COMMITTEE

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INTRODUCTION

PURPOSE OF THE RESEARCH

The choice of a research topic focused on the elderly stems from the realization of two historical trends whose influence is fast compelling seismic shifts in the way human beings conceive of a lifetime and the way that major social institutions might need to be re-designed to support that conception: the extension of life expectancies and the limitations of the welfare state.

EXTENSION OF LIFE EXPECTANCIES

Lifetimes are extending to the tune of two years per decade at birth in the technologically advanced societies, and about one year per decade at age 65. (Dormont, Martins, Pelgrin, & Suhrcke, 2010, pp. 12-15). There is no real end in sight. What individuals and societies will do with that extra time is of course unknown, but it offers a promise of learning, becoming, changing, and reshaping of an individual’s life on a scale which previous generations had no reason to try to imagine; but which ours and future generations must. Our concepts of youth, middle age, and old age, how long each are supposed to last and what constitutes a fulfillment, as well as an obligation of each period of the lifecycle, will no doubt evolve as a result of increases in average life expectancies. We are only at the beginning of a new evaluation of the potentialities of a longer lifespan. And what is more, medical improvements are likely to provide opportunities not only for extended lifetimes, but extended healthy, active, and cognitively clear lifestyles, which promises to bestow the benefits of greater experience
and hopefully wisdom on society as a whole, as older citizens become more and more prevalent in our workplaces, families, and voting booths.

All of which brings us to three of the most important questions of this entire work: What are the social and state institutional constructions that will be required to support an increasing population of older citizens, workers, and retirees? What are these citizens’ needs? And what are society’s and the state’s responsibilities as well as capabilities with regard to guaranteeing, or at least helping to maintain, a minimal standard of living for its older citizens?

LIMITATIONS OF THE WELFARE STATE

For while life expectancies have been lengthening, there is another historical development that had shown steady progress in the last century, but which, some would argue, has already experienced its culmination and is now slipping backward into an inevitable decline. That is the evolution of the welfare state, and the support it is capable of providing especially to the more vulnerable elderly.

It is, after all, the welfare state that provides in diverse ways and with variable success the objectives of society for material security, adequate political representation of diverse segments of society, and the maintenance of basic health and other important living standards that are not solely dependent upon individual wealth or income. In some cases these welfare states have even grown sensitive to the modern enlightened concepts of well-being developed by Armatya Sen, Peter Townsend, Louis-Marie Asselin
and others, which extend the notion of welfare beyond mere materiality and into the aspirations for self-fulfillment, social belonging, and the enrichment of human experience that is more reflective of late 19th and 20th centuries’ discovery of psychological needs, motivations, and fulfillment.

While such expansion might continue to evolve, some believe that the support structures of the modern welfare state may be starting to creak under the weight of so many diverse objectives, and new means of funding them need to be found. Where elderly welfare fits in a finite set of priorities for the welfare state must therefore also be considered, as the dollars raised through taxes have infinite uses, but are spent mainly in those areas that reflect a political consensus on current preferences.

Clearly, elderly affairs are not the only interest of the United States government or its electorate. Those who live on fixed incomes and no longer have a choice to work are, indeed, likely to be among the more challenged amongst us because there is simply very little they can do to change a condition of poverty. But whether the elderly or retired have priority in claims on the wealth of the entire society is an open question, and a preference shown toward them is perhaps not as easy to defend when younger people are experiencing financial difficulties connected to un-and under-employment and, more generally, when they are having a tough time maintaining a lifestyle that is not only under par with their expectations, but the expectations of several previous generations of working families that could realistically hope to step ahead of the lifestyle standard of their parents.
There is still more than a thread of belief in the world of an intergenerational historic march toward deeper and more widely-shared human potential development, the faith of which survives in spite of modernism’s skepticism toward the ideal of the perfectibility of either man or society. This belief in progress has to find expression somehow and somewhere, and it is difficult for some to imagine how it could be expressed societally without some notion of a welfare state expanding as part and parcel of a shared notion of human progress. Still, others believe this is the time to cut it back. Still others believe this notion of progress is misplaced at the beginning of the twenty-first century. Not only is elderly security and welfare not the highest priority for the welfare state, under this notion, but they shouldn’t be goals of the state at all.

This paper examines the moral and material claims of longevity on society’s considered sense of obligation to provide some minimum level of opportunity for the elderly to experience a good life, and to live out their days with a real sense of security. Its primary objective is that of determining whether social institutions which support elderly welfare are working well enough to ensure that the elderly are experiencing an acceptable quality of life and a sense of security in it, particularly after retirement.

Finally, if institutions do not currently provide such insurance of a good quality of life and sense of security for our elderly, what should our society do to improve (or replace) those institutions? An evaluation of a few promising recommendations to improve those institutions is contained in the final chapter of this paper.
SPECIFIC GOALS OF EACH CHAPTER

A summary of the goals of each chapter follows.

FIRST CHAPTER: STANDARDS FOR THE MEASUREMENT OF RETIREMENT SECURITY AND ELDERLY WELFARE

In the first chapter, various standards and measurements for ascertaining the significance of poverty or level of welfare of individuals and families, and particularly of older citizens, including retirees, are described. The Chapter evaluates the differences between several standards and compares the advantages and disadvantages of them for the measurement of retirement security and elderly welfare, and the reasons behind our choices for the standards and metrics that are used in the remainder of the text.

SECOND CHAPTER: THE CURRENT STATE OF THE UNITED STATES ELDERLY: INCOME, WEALTH AND EXPENDITURES

This chapter examines financial data on income, wealth, and expenditures of particular significance to the elderly in order to answer the question, ‘How are the elderly faring?’, especially with respect to their ability to avoid material poverty, and also in terms of their ability not to fall far below their pre-retirement consumption or ‘lifestyle’ standards when they stop working, which is an important measurement of retirement income security. Measures of retirement income adequacy are presented that provide a
cohesive picture of the elderly of the United States, as well as subpopulations that are particularly ‘at risk’ in their retirement years.

**THIRD CHAPTER: COMPARATIVE ANALYSIS OF REPRESENTATIVE NATIONAL PENSION SYSTEMS TO THE UNITED STATES PENSION SYSTEM**

This chapter pulls away from the focus, up-to-then, on the United States’ elderly and begins to bring into question the design of elderly welfare and income security systems at large. In this chapter, we cast a brighter light on the broader net of the international community’s experiences facing the same questions that the United States faces – how to deal with increasing longevity and reduced fertility, causing the number and average age of retirees to increase and providing additional burdens on retirement security systems. Our analysis concentrates on the United States and three other countries; France, Sweden, and Japan. To provide for this international comparison, a set of universal objectives that each retirement income security system should aim for is laid out as the primary objectives of the best national retirement income security systems.

**FOURTH CHAPTER: RECOMMENDATIONS FOR THE REVISION OR REFORM OF THE UNITED STATES RETIREMENT INCOME SECURITY SYSTEM**

The final chapter provides a summary evaluation of both of the main parts of the United States retirement income security system – Social Security and the private pension or ‘occupational’ pension system. The Chapter poses the question whether either part should be ‘fixed’ (repaired, or slightly altered) or reformed (significantly or fundamentally changed), or even replaced? The answers to these questions lead directly
to the last part of the chapter, which proposes recommendations for changes aimed to significantly improve the quality of retirement security in the United States.
INTRODUCTION

In this chapter, we will assess alternative ways for determining the overall state of the elderly so as to be able to evaluate their greatest needs. An assessment of the elderly as a subpopulation and subcitizenry of the United States, and of the primary institutions that support them, are key to our analysis for two reasons:

First, we hope to be able to determine whether the elderly, or significant portions of them, are suffering with respect to standards on which reasonable persons could agree were well-designed to depict the elderly’s true state of retirement security.

Second, those programs which are designed to support the elderly need to be evaluated on the basis of the security they actually provide to them. The actual and relative benefits of these programs need to be traced down to the retired persons who actually receive them. If warranted, the performance of these programs may require reforms of those existing programs, or replacement of them by new programs.
As we go through the evaluation of different standard measurements and perspectives that could help in our assessment of the current state of the elderly, we also must recognize that those standards and measurements that are most able to provide a summary of the elderly’s condition and which have the best chance of producing comparable standards will have the greatest utility to this study. This is due to the fact that this study is mainly interested in discovering the primal but proximate¹ causes for the problems which the elderly face and in evaluating the most likely beneficial relief that could be designed to ameliorate these problems, but without going so much into the ‘weeds’ that the largest phenomena are buried in detail.

In other words, we need to come up with standards that both encompass what is essential to know about the elderly’s current state and what could be helpful to measure to determine whether societal interventions are really working, but on a fairly large and broad scale. That scale is necessarily determined by the focus of this essay, which is mainly concerned with discovering and ameliorating problems that can improve the security of the elderly retired by fixing or reforming the most impactful social institutions that are tasked with providing such security. In the United States, these are the Social Security system and the private pension system. There are versions of both of

¹ ‘Proximate’ is meant as a parameter designed to rein in any examination of the ‘root’ causes of retirement insecurity if that would involve, say, the description or discovery of any biological or anthropological predispositions that make members of society less interested in their elders’ welfare after a certain age, or predispositions of the Western countries, say, to want to banish the old to an apolitical and economically ineffective group status.
these in many other advanced national economies to which we can, and will, compare them in later chapters.

A ‘summary’, or a few summaries of the elderly’s condition is preferred because they can point to both the size and type of any major social intervention that might be required to ameliorate the biggest problems, provided those problems can be subsumed under a larger category without losing much of their individuality. Sadly, however, some individuality is always lost, and we must be mindful of those losses even while we defend the use of more summary measures.

For example, a person who is having trouble paying rent and partaking of nutritious meals is often described as poor (assuming several other things about his circumstances, such as his ability to recognize his own needs for these things and his capacity to prioritize them above other things that may be purchased with money). But not being able to pay for these things generally means the individual is economically deprived, and the societal intervention might be to increase his income.

So ‘summing’ these two problems as indications of poverty or economic deprivation does not damage their identification as problems likely to be solved by economic means – by increasing income, for example.
However, if one lives in a nation where such problems are generally solved more with in-kind programs rather than income transfers, combining these two problems together under the heading of ‘economic deprivation’ makes them lose valuable discriminations that would be helpful to that society to maintain. For example, an uptick in the incidence of nutritional diseases might suggest the need for an increase in the allowance of food stamps or a lower standard of eligibility requirements, while an increase in the number of elderly renters being kicked out of their apartments because of late rent payments may recommend to a society that provided rental assistance that it might be time to re-examine average rent so that the subsidies could be adjusted upward. Therefore, what standards to use to gauge the status of a subpopulation must recognize both the advantages of aggregation and the loss of important information that could help to fine-tune its welfare policies, if aggregation is used.

Having both types of information and standards available is best, but it becomes more and more difficult to come up with summary statements of a subpopulation’s state the less one can aggregate standards that look only at a limited number of criteria at the same time. It is valuable, for example, to know whether a subpopulation has more or less discretionary income than a year or decade before, or whether their overall health is improving or getting worse over time. Since our present inquiry is mainly about the elderly population in general, the best standards and indicators will be the broadest and, for reasons of practicality, those most available. These sorts of trade-offs between precision and summation will need to be evaluated on a case-by-case basis, but as we
are looking for a sense of a general condition summation, large measurements of the elderly population will usually prove to be advantageous for our purposes.

We also indicated that comparable standards were more likely to be valuable to this study. ‘Comparable’ standards here mean that the preferred standards for measuring elderly welfare are capable of being used to assess the population of the elderly in the United States as well as the populations of a sample of other nations to which the elderly of the United States can be compared. This ability to compare and critique also extends to similar national institutions that are closely related to elderly welfare, and as this type of comparison is a fundamental element of this study, particularly in Chapters 2 and 3, this will require in some cases the use of internationally recognized standards. This fact further narrows the choice of possible standards we can use.

At this point we do not wish to remove from our discussion of the best approaches to the measurement of the retirees’ state all references to standards that cover a smaller aspect of the elderly’s current state which are perhaps important to preserve because those standards are likely to be particularly instructive in terms of the importance of the states they are measuring and the identification of the measurements with a particular national institution. An example of this would be health statistics on costs, as health costs are both an important component of the elderly’s state as well as a large component of society’s welfare system, in particular Medicare and Medicaid. Just the same, these costs could be subsumed under a larger cost for the elderly – the cost of living – and of the institutional support that partially covers those costs – under
national elderly welfare programs, for example. But because of the size and importance of these costs to the elderly and our national economy and targeted programs to the elderly, it seems to make sense to break them out on their own. These are some of the types of decisions we must be prepared to make as we evaluate the best possible standards to use for this paper, which will have their main usage in Chapter 2 when they are applied to the elderly of the United States.

This chapter will therefore briefly evaluate standards that seem most likely to help us assess the state of the elderly and which promise fruitful utility in their capacity to keep us informed of the likely result of interventions we may wish to make. The chapter will end by describing a choice of standards and measurements that seem most promising to the fulfillment of these two objectives, and which will be used extensively – but not exclusively - in the remaining chapters to describe elderly security and insecurity.

**CONCEPTIONS, STANDARDS, AND CRITERIA**

In determining methods for evaluating the state of the elderly, one conception of the ‘good’ maintains that an individual (or family) with sufficient resources can generally be expected to obtain the material things he needs to live a life that is at least adequate under some standard, such as a bare minimum of food, shelter, clothing, and social participation. In these types of conceptions, what one actually does with these resources, which may be to purchase goods, services or other types of resources is not really anything that is measured or even examined. Instead, the assumption is made that
individuals and families will be able to purchase those things that are needed to attain a minimum standard of living, if they have sufficient resources (often, money income) to obtain them, and that they will purchase those things. This minimum standard of living is defined, however, for individuals and sometimes for families, as having the ability to obtain a basic level of resources such as food, shelter, clothes and other necessities for material well-being that are needed to avoid economic deprivation. This conception is detailed below in the section on Economic Standards of Well-Being. The criterion for this conception is generally, available income that can be compared to the minimum costs of consumption to achieve the basic standard of living. That income level determines whether the standard is met or not met. We will focus on this conventional type of standard in a following section.

Diametrically opposed to this conception is one that perceives that the standard for the ‘good’ is best realized as a measurement of the ability and fact of performing or attaining states or functionings that are valued by the individual (or sometimes, valued by the society of which the individual is a part). This conception skips over the intermediate steps between having resources and actually doing things with them and looks at the end result. That is, this standard focuses on what individuals are actually doing and attaining and what they are not able to do or attain that they value. This conception of well-being is associated with the well-known economist and philosopher Amartya Sen.

Let us imagine the application of Sen’s method to some of the problems of the elderly. We could focus on particular health issues, difficulties finding public transportation, the
inability to attend public events because of the shame of inadequate dress or presentment, or the lack of special education to help elderly drivers maintain their safety records after their retirement begins, as challenges to the elderly in terms of their functioning. These are all questions that are germane to the status of the elderly and important to the society who are concerned for them.

But Sen’s method is not so useful for our main purpose. It is not conducive to telling us much about what might be done to improve the elderly subpopulation in a way that can be translated into terms that can be ‘understood’ by our main social institutions that support elderly welfare, and which are unabashedly directed to provide resource-based, economic information. Perhaps more importantly, for our purposes, Sen’s method for determining functionings and abilities to do things is not as useful as ‘larger’ measures of elderly security. We need, for this study, measures that aggregate small things so we can focus on the forest instead of the trees.

Without rejecting the utility of Sen’s functioning and capabilities approach for its ability to inform us about important characteristics of this subpopulation, any measurement of the lack of functionality and capability – assuming we can reasonably agree on the appropriate standards for these two concepts for each type of capability we wish to measure - have generally to be translated into economic needs for them to be useful inputs to our evaluation of institutions that are prevalent, and designed to support retirement security in, advanced industrial societies. In these societies and for those institutions, the lingua franca is chiefly money. And so how much money is needed to
purchase goods and services at minimal quantity and cost is usually the question, and these are characteristics of economic standards that are discussed in the next section. Still, while Sen’s approach cannot be the primary one we use for this paper, the need for a standard for measuring accomplishment in doing and being is acknowledged as an important assessment of individual and societal health.

Let us now flesh out some economic, resource-based standards and describe differences between them as well as their relative advantages and disadvantages in the use we will need to put them to in the remaining chapters.

**ECONOMIC OR RESOURCE-BASED STANDARDS FOR WELL-BEING**

A minimal level of well-being has historically been described in terms of resources needed for a life that is not economically deprived. Thus, the good in this kind of standard may be defined as the absence of economic deprivation. The question whether an individual or family is poor turns on the question whether individuals or families have sufficient income necessary to purchase basic goods such as food, shelter and clothing and obtain basic services such as medical care. This type of standard is the type that had been originally developed for our own national poverty standard, though we will show in our discussion of its history that this national poverty standard is no longer one based on the costs of food, shelter and clothing or other basic services. Nonetheless, this type of standard is still an important theoretical conception of one that can be very useful for determining the economic state of an individual and family, and so will be
included in our discussion on the alternative conceptions and standards of poverty and wellbeing.

As stated, the actual standard measurement for a poverty level (or higher level of economic welfare) is usually expressed as a level of income, such as an annual dollar amount of income for a family of four, needed to buy certain goods in certain amounts necessary to meet a conception of an adequate material existence. It is fundamentally fixated on the question of what is needed for an adequate material existence, which becomes the criteria that defines economic deprivation (of course, a poverty line can be used to mark success as well as failure, such as in a public policy that is successful at reducing the level of poverty). The poverty income line’s primary focus is therefore on consumption, and the costs of an adequate material existence are its true standard, which is compared to the income of the individual or family. The income level is sometimes confused with this standard, but the income level is merely the means by which the resources needed for a life that is not economically deprived – the food, clothing, shelter, and medical supplies – can be expressed in one number representing the costs of the minimally adequate consumption, which is the true standard.

These types of standards that depend upon a formulation of basic human needs can differ significantly with respect to the types of needs considered basic and the extent to which those needs can be determined to be capable of being fulfilled by looking only at one indication of resources – income. One can easily imagine that people are likely to differ in their opinion as to whether listening to music is a basic human need, for
example. Some will say it is, while others will mention that this is more important than eating itself. So this is an initial criticism of this standard approach. It usually leaves out a lot of things that significant portions of the population might value very highly.

One of the advantages of this type of economic standard, however, is that it has been conventionally used and it therefore often provides comparable measurements over time. It has also historically been concerned with goods and services needed for a low level of material existence, and is a familiar conception of well-being. Thus, the economic standard is both a well-known conception and can, properly used, show changes in poverty rates over time.

The standard is also essentially fixated on biological needs for food, shelter and clothing. Nonetheless, its more modern development also considers the ability to take part in social activities, for example. There also is another more recent recognition that an economic standard needs to have built into it some standard for nonspecified items so as to make up for the fact that the variety of people and their needs are so individualized that it would be futile to try to specify their variety in a standard that was defined entirely by particular goods and services, or even categories of goods and services.

This individuation can be (very) imperfectly approached by having a ‘multiplier’ built into the consumption standard, and by posing the standard as a sum of minimal costs for basic goods (generally, food, shelter and clothing) multiplied by $1 + \text{a fraction of the}$
costs of the basic goods. For example, if the food, shelter and clothing budget were $1,000, and the multiplier were 25%, then the total consumption budget would be $1,000 x 1.25, or $1,250. The ‘term of art’ in this formula, of course, is the multiplier itself. The particular multiplier used has to be defended on the basis of the relationship, in the real world, between the nonspecified goods assumed covered by the multiplier and the food, shelter and clothing costs which is used as its ‘base’. There is no way to get that multiplier ‘right’ in all cases. Joe and Sue may each need $20,000 per year for food, shelter, and clothing costs for 2014, but Joe may rely on 30% more over-the-counter drugs for his frequent colds than Sue, for example, a fact that cannot be used to differentiate how the standards apply to either Joe or Sue, though it seems more differentiation is called for.

On closer examination, the problem of the multiplier is the same problem as the more specific problem of the specified consumption goods. The ‘one standard fits all’ assumption is never true, because the needs for any family or individual are never the same as the next. This is perhaps the greatest problem for this type of economic standard. Its drawback is that the standard does not adjust for different needs and circumstances, and cannot, if it is to be a standard at all. When the standard is applied, then, it will misdiagnose some economically deprived individuals and families as not economically deprived, and some noneconomically deprived individuals and families as economically deprived.
Adjustments can be made to adapt the standard to the specific circumstances of individuals and families, but in doing this, more specific information about individuals and families has to be collected, and individuated standards would have to be agreed upon. All the problems of Sen’s methods come to the fore, and the ease and simplicity of using a summary standard is lost. Comparability is also extenuated because different times and different nations may use different degrees of individuation and support different standards. For that reason, simpler standards are preferred for economic deprivation standards, and these will be the ones used for the bulk of this examination.

TWO DIFFERENT KINDS OF ECONOMIC STANDARDS: ABSOLUTE VS. RELATIVE

While we hope we have now shown the advantages of economic standards for the purposes of this examination of retirement security over Sen’s functioning standards, there are two major sets from which we can choose. Even the method for determining the costs of the basic basket of goods might cause two models for determining poverty using a ‘basic goods’, economic standard approach to be very different.

For example, one poverty standard might be based on an absolute or ‘expert’ description of basic needs that may be consistent with a question such as, ‘What does a family of four need to obtain a basic human existence free from physical want?’ An expert on nutritional needs and costs, shelter needs and costs, clothing needs or costs, and other material needs and costs would need to be summoned to write up a budget that is based
on the minimal level requirement for satisfying each of these basic needs (plus the multiplier for the unspecified consumption goods, if we are going to have one).

There is also the ‘relative’ standard approach to determining an answer to the same question. The National Academy of Sciences’ (NAS) standard does not look directly at the costs of basic goods that people need to survive according to experts, but rather on what people are actually spending on basic goods in a society, on average or at the median. This type of economic standard then posits that a certain portion (such as half or some other percentage) of that average or median level of actual consumption represents the basic standard threshold of poverty or economic deprivation. People who do not have sufficient income to consume at that level are considered economically deprived.

Thus, the standards and criteria can be different for an economic standard for material sufficiency even if the conception of good is similar. Nonetheless, these differences between an ‘absolute’ budget standard, which coincidentally was the original basis of our national poverty level threshold, and the ‘relative’ consumption budget used by an alternative National Academy of Scientists’ (NAS) standard, will be explained in more detail in a moment, as a lead-in to our choice of the most useful standards for measurements of retirement security.
One of the important means of drawing attention to the problem of retiree welfare and insecurity is to document the incidence of poverty within that subpopulation. If the incidence is lower than other subpopulations, perhaps an argument could be made that targeting programs and resources on that elderly subpopulation might be unfair since there are other subpopulations that need the targeting even more. If the poverty measurement instead shows that the incidence of poverty is particularly high within the elderly population, then that fact would probably support a more active intermediation of the society to relieve the high incidence of poor elderly, and to design new or improved services, or to provide additional money or benefits, or other programs targeting the poor elderly.

Let us examine more closely how the present national poverty standard works. After that we will compare it to another type of economic standard that many consider an improvement over the current standard. Importantly, these standards differ in terms of the number and proportion of elderly which they identify as poor.

The official standard of poverty in the United States already has a large footprint in terms of the number of citizens and government agencies that are impacted by it. This standard is used by United States governmental agencies as part of their needs.
assessment for welfare benefit programs, including qualification for grants of assistance and in-kind benefits. It is the ‘gold standard’ in terms of its formal and public policy status in national statistics citations. It is a standard for basic economic sufficiency, and it was originally based on an absolute (‘expert’) budget for food, shelter and other basic goods.

The official United States poverty measure is a monetarily expressed income threshold below which households and individuals in that household are considered to be living in poverty. Also called the Census Bureau poverty line, this metric and its related resource measurement tools, or criteria, which are based on income, possess an innate power to form the popular conception of the rate and direction of poverty. Equally, however, it has the power to misinform them about the true state of their fellow citizens’ material existence and the success or failure of their society to improve conditions over time. Unless the official poverty measure for the United States serves well its basic purpose – to gauge the level of resources necessary to live a safe and healthy life and to avoid economic deprivation, and as a standard tool for determining whether public welfare and other policies are effective in ameliorating poverty – this national poverty metric should be critiqued. If the measurement can be improved, it should be modified or replaced, in that case. There is too much potential suffering or relief at stake to underestimate the importance of an accurate national poverty standard.
Mollie Orshansky, an economist in the Social Security Administration (SSA), developed the poverty thresholds, in 1963 and 1964. These thresholds were first adopted by the Office of Economic Opportunity, which was created by the Johnson Administration’s War on Poverty (Fisher, 1992, revised 1997, p. 13).  

<table>
<thead>
<tr>
<th>Size of family unit (Census Bureau, Poverty Rate 2009)</th>
<th>Weighted average thresholds</th>
</tr>
</thead>
<tbody>
<tr>
<td>One person (unrelated individual)........................</td>
<td>$10,956 11,161 10,289</td>
</tr>
<tr>
<td>Under 65 years...........................................</td>
<td>65 years and over...............</td>
</tr>
<tr>
<td>Two people................................................</td>
<td>$13,991 14,439 12,982</td>
</tr>
<tr>
<td>Householder under 65 years...............................</td>
<td>Householder 65 years and over......</td>
</tr>
</tbody>
</table>

Figure 1 indicates the poverty thresholds for 2009.

Orshansky developed the poverty thresholds at a time when there were very limited data on prices for a “market basket” of goods that might have been used to determine a minimum budget for a measure for a poverty threshold, and in fact her original attempt

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2 Much of the historical material referenced here comes from Fisher’s history of the United States’ official poverty measure. (Fisher, 1992, revised 1997)
was not to formulate a poverty threshold. Her work was well-known in government, however, and constituted the most serious attempt available to assign standards for a level of income adequacy, although she herself lamented that there was “no generally accepted standard of adequacy for essentials of living except food.” (Fisher, 1992, revised 1997, p. 4).

The standard of living that was gradually formalized into governmental measurements of poverty was based on food plans that were developed by the Agriculture Department. These food plans were described as “liberal, moderate, low-cost, and economy”, listed in the order of most expensive to least expensive. These were food budgets for families of different sizes, with the first three of these plans having been developed in 1933 by the Agricultural Department. The ‘economy’ food plan that was developed in 1961 was based on the Agricultural Department’s 1955 Household Food Consumption Survey, to be discussed later in this subsection.

Mollie Orshansky developed poverty thresholds using the ‘low-cost’ and ‘economy’ plans, that is, on the two least expensive food plans developed by the Agriculture Department. She theorized that the low-cost plan was “adapted to the food patterns of families in the lowest third of the income range” and “has for many years been used by welfare agencies as a basis for food allotments for needy families and others who wished to keep food costs down”. She also developed a poverty food budget that was lower, based on the ‘economy’ plan, which cost less than 80% of the low-cost plan. The ‘economy’ plan was described by the Agriculture Department as only to be used for
“temporary or emergency use when funds are low”. Nevertheless, it was the lower, ‘economy’ poverty line that was eventually adopted by government as the basis for the poverty threshold, and so no further mention will be made of the ‘low-cost’ plan. Note, however, how this standard got off to a very ‘cheap’ start, with ‘economic deprivation’ marked down to a particularly low standard of economic self-efficiency. (Fisher, 1992, revised 1997, pp. 4-7).

Borrowing from another Agriculture Department Survey, namely the 1955 Household Food Consumption Survey, Orshansky found that for families of 3 or more persons (regardless of family income), the average food budget was about 1/3 of money income after taxes. So the poverty threshold produced by the Census Bureau today, and used as the United States’ official poverty measure, is based on a food budget for the Agricultural Department’s ‘economy’ food plan developed in the 1950’s multiplied by 3, that is, the ratio of food costs to total after-tax income was assumed to be 1/3. This is in spite of the fact that food accounts for closer to one-eighth of family expenditures in recent household budgets, while housing, which was not even a separate component of the original and current poverty budget, constitutes nearly one-third. (The New York City Center for Economic Opportunity, 2008, p. 9, citing Bureau of Labor Statistics consumer expenditure data). These are weak points in support of a standard that is generally supposed to symbolize an idea of economic self-sufficiency based on the actual average consumption behavior of real people. This is perhaps its most serious flaw.
Finally, with regard to adjusting the poverty threshold to different family sizes, Orshansky acknowledged that fixed costs, such as for housing, increase per person as the household unit diminishes, so she developed a ‘multiplier’ to adjust this budget for different sized families, which was 3.7 for two-person families (which was supported in the data produced from the Household Food Consumption Survey) and at 80% of the two-person families’ threshold for one-person units “on the premise that the lower the income, the more difficult it would be for one person to cut expenses such as housing and utilities below the minimum for a couple”, she later wrote. (Fisher, 1992, revised 1997, p. 6).

Because the Agricultural Department’s food plans had 58 categories of nonfarm families and 4 categories of nonfarm related individuals, there were originally 62 different poverty thresholds. These categories were based on the different Agricultural Department food expense budgets for “aged’ head of households versus ‘nonaged’ heads, which were based on Agricultural Department determinations in composing these food budgets that the aged’s food needs resulted in lower costs than nonaged families.

The categories also differentiated between the absolute size of the family unit, the composition of the family (number of children vs. adults, for example), and the sex of the head of the household.
Separate thresholds were originally developed for farm families under the assumption that these families derived a significant proportion of their food from their own farms and gardens. In fact, the 1955 Household Food Consumption Survey indicated about 40% of farm family food came from their own farms. Poverty thresholds for farms were therefore set at 60% of nonfarm thresholds. This differential was gradually diminished and was entirely eliminated in 1981.

At this time, there are 48 different poverty thresholds that depend upon both the size and age of the household. Notably, people over age 65 are deemed to consume less and therefore are assigned a lower threshold. Nonetheless, even under the severely flawed Census Bureau measure, income is a decreasing function of age and poverty an increasing one. We will look at an illustration of this in a moment.

The Office of Economic Opportunity (OEO), headed by Sargent Shriver, adopted Orshansky’s poverty threshold in May of 1965 for “statistical, planning and budget purposes” and according to an internal memo issued by that agency, chose the lower, ‘economy’ measure “on the premise that the first order task of the War Against Poverty is to get at the hard-core poor.” Although Orshansky and others complained that a poverty measure based on relative prices (in this case, that of general costs of living compared to a low-income food diet) and not adjusted for price changes could not be accurate for long, the poverty threshold was not adjusted until 1968 based on new data from the 1965 Household Food Consumption Survey. However, in spite of the Consumer Price Index (CPI) showing a change in the relative prices of food and other consumer
prices (food prices remained unchanged between 1963 and 1964 and between 1966 and 1967, while other costs increased), the ‘3-to-1’ multiplier was not changed. This multiplier remained intact, but the total poverty line was adjusted for changes in the CPI annually thereafter. In 1969 the Bureau of the Budget (forerunner of the Office of Management and Budget) directed all federal executive branch agencies to use these revised poverty thresholds, as issued by the Census Bureau. This was the beginning of its national, ‘official’ status that continues into today.

Differences between male-headed household and female-headed household thresholds were challenged in the Carter administration, and were eliminated in 1981. The first Bush Administration appropriated funds for the Bureau of Labor Statistics to work with the National Academy of Sciences (NAS) to design improved means to measure poverty, but this was changed to the Census Bureau. The result of this project is described as the NAS standard and is defined in the next section of this Chapter. (Fisher, 1992, revised 1997, pp. 8-64).
Note how the official poverty measurement standard started its life as an expert budget measure but was really only based on one basic staple – food, and that the whole standard was expressed as a 3 – to – 1 ratio of all basic goods needed to avoid economic deprivation to food – a relationship that does not represent either the current ratio or one that existed for long in the early 60’s, when it was first posited. Thus, our current poverty standard was not a well-developed economic or resource-based standard from the start. Its errors were only ‘pushed forward’ by an inflation rate adjustment that could not have taken into account changes in the prices of a realistic basket of consumption goods that represented a basic budget that avoided economic deprivation, because the standard was not designed based on a basket of real consumption goods, only one abstractly derived from the cost of a food budget that was low even in the 1960’s.

That this standard continues to be used as a national poverty standard in spite of these flaws seems incredible, especially because other, more accurate expert budgets could be designed that take into account the basic goods and quantities that members of society might agree do represent a level of material existence that is not economically deprived. But such a budget, although much improved over the current, official poverty threshold budget, would still be an expert budget, and would still need to take into account the opinions of experts, which as we will see in a moment, are not always as objective as they may seem.
While this expert budget alternative continues to exist as one that could be brought out and developed more ideally, which would result in significant improvements over the current national poverty standard, let us introduce another type of economic standard that has gained the upper hand in recent years and which is often cited as the natural replacement of the current poverty standard. It deals with some of the problems of the current standard by keeping the consumption basket of goods’ specific articles and costs up-to-date, but also expands the definition of an economic standard to take into account a poverty standard’s relative placement in a distribution that represents consumption patterns across the population.

INTRODUCING A RELATIVE POVERTY STANDARD DEVELOPED BY THE NATIONAL ACADEMY OF SCIENCES (NAS)

PANEL ON POVERTY AND FAMILY ASSISTANCE

The Panel on Poverty and Family Assistance was created by The Joint Economic Committee of Congress to make recommendations for improving the official poverty measure in the early 1990’s. The study was performed by the National Research Council (“NRC”, within the National Academy of Sciences, “NAS”), and its scope was expanded early on to consider related issues with respect to standards for welfare payments to needy families. Although the panel was set up in 1992 with an expectation that its recommendations would soon be taken up by the federal government, there has been no change in the official poverty measure in the over 20 years since the panel published its report. Nonetheless, the report’s criticisms and suggested improvements represent an important milestone in the ‘theoretical’ history of the United States poverty
measurement, and this report still enjoys considerable deference from those in Congress who want to update and improve the Census Bureau’s official poverty measure.

However, it is not without flaws in terms of the choices the panel ultimately recommends, some of which are outlined by a dissenter in the first appendix to the report (John F. Cogan of Stanford University) and by many commentators since. Nonetheless, the major conception of the standard has broad support.

HISTORICAL BACKGROUND

As a means of addressing the broadly felt inadequacies of the Census Bureau poverty threshold and its techniques for counting resources, the National Research Council of the NAS was granted funds by Congress which were appropriated through the Bureau of Labor Statistics of the Department of Labor, and later through the Bureau of the Census, to examine and make recommendations concerning the development of a new standard for poverty and resource measurement. The NAS published its analysis and recommendations in 1995. In general, its recommendations reject several of the assumptions underlying the creation and maintenance of the official Census Bureau poverty thresholds and opts to use various statistical resources that barely existed when Orshansky first developed her poverty thresholds in the early 1960’s.

This section will concentrate on a presentation of the NAS standard and analyze its most significant differences from the Census Bureau’s, and, using Census Bureau data and what is hoped will be a fairly close, but updated approximation of the NAS
recommended methods for determining both the threshold level and measurement of resources, the application of the NAS methods and definitions to real data.

![Figure 2: Census Bureau Economic Standard for Poverty vs. NAS Recommendations, Major Features](image)

<table>
<thead>
<tr>
<th>Feature</th>
<th>Census Bureau Measure</th>
<th>NAS Recommendation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Poverty threshold</td>
<td>Food expenses x 3 (adjusted for inflation annually)</td>
<td>Budget for food, clothing, and shelter plus an additional amount based on actual consumer expenditures (adjusted for changes in consumption and prices annually)</td>
</tr>
<tr>
<td>2. Adjustments for family size and type</td>
<td>Separate thresholds for 48 family types; elderly singles and couples have lower thresholds</td>
<td>Modify a threshold for a 4-person family by using an equivalence scale that takes into account economies of scale and assumes children need less than adults</td>
</tr>
<tr>
<td>3. Adjustments for geographic differences in costs</td>
<td>No geographic adjustments</td>
<td>Adjust housing costs by region and size of metropolitan area</td>
</tr>
<tr>
<td>4. Resource definition</td>
<td>Before-tax money income from all sources</td>
<td>Income tax - and payroll tax - adjusted money income minus childcare and work-related transportation expenses and medical care expenses (including insurance premiums)</td>
</tr>
</tbody>
</table>

As we see in Figure 2 above, the Census Bureau measure uses an expert approach for determining what the budget should cost. However, it really only uses one commodity – food – to determine the budget for all of the other items in a household budget, and as we pointed out earlier, the relationship of the costs of food, shelter, and clothing (considered to be materials essential to living) is no longer approximately 3 to 1 as in the early 1960’s. The cost of food relative to other components has gone down, having the result that the budget standard is definitionally understated.
There are some adjustments for family size and family types in the Census Bureau poverty standard, though the elderly were considered to need less in terms of food and therefore the whole budget had a lower threshold for older citizens as a subpopulation. However, there were no geographical adjustments made though it is clear that different geographical areas are subject to different costs, and only pre-tax income was counted as compensation, in spite of the fact that the elderly receive significant in-kind benefits such as food stamps and in some cases their after-tax income (which is, after all, what is used to buy articles to consume) is significantly smaller than their pre-tax income.

Now let us take a look at Figure 2 from the NAS perspective. First, it designs a budget that is based on more than just one commodity – food, as in the Census Bureau budget. The budget consists of 4 categories of consumption – food, clothing and shelter plus a little extra (20%-25% more) to take into account the fact that not all things necessary for living are included as articles of food, clothing or shelter.

The modifications the NAS makes to the threshold also make more sense than under the Census Bureau model. It assumes children need less food than adults, for example, and does not assume that the elderly need less food than adults in the family.

There are also additional adjustments that the NAS standard makes for geographical location that account for differences in house prices and rent, items not adjusted for in the Census Bureau method.
Finally, Figure 2 indicates that the resources used in the NAS standard are expressed in terms of after-tax income, further adjusted by childcare expenses and work-related expenses including medical and transportation costs. These costs are deducted from income rather than added as consumption items to the standard basket of essential goods because it would have been impossible to ‘budget’ for them. There can be no predicting what a standard amount of these goods and services might be because many people can go years without spending much on, say, health maintenance or medical care, and then could spend thousands of dollars in a given month when sickness or medical emergencies strike.

While it seems clear how the NAS approach is preferable to the current poverty level threshold on the basis that the Census Bureau measurement is not even ‘true’ to its own type of ‘expert’ budget, and the NAS approach contains finer adjustments to take into account differences in geographical location and work-related expenses as well as medical costs, there is still one item in Figure 1 that needs more explanation and emphasis and which separates these two types of standards as ideal ‘categorical’ approaches to the measurement of poverty based on income and consumption budgets. That is the difference between the Census Bureau ‘expert’ approach and the NAS ‘actual expenditure’ approach. These differences, and the importance of them to a national standard for poverty, are discussed in the next section.
Many European countries use as a poverty threshold a relative measure, such as a percentage of the median income. (Citro & Michael, 1995, pp. 31-32). But this method cannot describe a threshold below which a human being cannot subsist, which is the principle underlying an ‘expert’ consumption budget threshold embodied in an economic measure of deprivation such as was originally developed by Orshansky. Even if a poverty definition included a cushion to bring up the level to something higher than bare subsistence, a relative measure cannot accurately depict the aggregate costs of sufficient food, shelter, clothing, medical expenses, or whatever goods and services are included in the definition of an absolute level of material welfare. A relative measure simply does not describe a minimal consumption budget requirement in that way.

Because a minimum consumption budget is often what people mean by a poverty threshold, intuitively, the strength of Orshansky’s original conception of economic deprivation based on an expert determination of minimal standards of material resources is that it strives to describe just that- what is needed to maintain the lowest standard of material living that is viable to maintain human life. Such an absolute concept cannot become confused with a concept that is more related to notions of inequality or equality, someone’s consumption compared to his peers or other subgroups of the population, or measurements that are more concerned with nonmaterial effects of deprivation, such as social and political isolation, which the NAS standard encompasses indirectly. An expert consumption budget poses an absolute
standard that is totally oblivious of that consumption budget’s position on a continuum that contains all actual consumption budgets and is completely unconcerned about a family’s relative position amongst other families.

A consumption budget that is associated with an absolute measure defines first what goods and quantities are required, and then determines their prices and thus the income needed to provide for them. A relative measure looks at the distribution of income or consumption in a nation (consumption in the case of the NAS standard), and sets the threshold as some proportion of it, such as some percentage of the median (or the bottom 20% of families, etc). A budget derived this way from the distribution of income or consumer purchases may, theoretically, either be more or less than what is required to subsist, and in a relatively wealthy society that is generous toward its lowest-income members, could be much more. However, such a ‘relative’ measure is bound to provide for more than an expert budget would because it is based on the consumption experience of individuals and families that are occupying points in the income or consumption distribution that are generally above a poverty level threshold set at a minimum level of food, clothing, and shelter.

This does not mean that such a measure is not valuable for other purposes than a poverty budget, as members of a society could indeed feel poor, or a nation could indeed consider it a moral obligation to bring up everyone to an income level that is not so far below a median that citizens do not feel ‘part’ of that society or suffer emotional harm because of their relative income. Economic deprivation and all its harms are certainly
not ameliorated entirely by guaranteeing a subsistence budget. But if we are interested in composing a measure of poverty in terms of something close to subsistence consumption as a first step, any relative measure must be rejected. If we want to measure absolute poverty, we must define the standard in terms of absolute poverty, not as a standard in which some proportion of an income distribution will be ‘defined’ as poor, without regard to the actual ability of humans living within that standard to physically exist.

That is the absolutist’s ‘expert’ budgeter’s theoretical argument against the relativity in the NAS method for determining poverty, but let us now follow up with an argument for the relativist methods represented by the NAS poverty threshold which, for many, poses the better argument.

A RELATIVE STANDARD DEFENDER’S ARGUMENT AGAINST AN ABSOLUTE (‘EXPERT’) BUDGET STANDARD

While the NAS measurement continues to try to get at what the Census Bureau, official poverty measurement method was originally designed for, which is a quantitative method for determining economic deprivation useful for developing policy targets and measuring progress, it introduces relativistic elements, which changes the poverty measurement from a purely absolutist basket-of-goods budget based on expert opinion to one that determines the poverty line by reference to actual consumer expenditures of families at some distributional threshold that many people would be comfortable
describing as “relatively” poor. There is an intention that this threshold, at the same
time, captures the essence of economic deprivation that is attempted to be described in
an expert absolute budget line, but it generally tends to go a little further in its vision of
poverty, and tacitly recognizes that people lower down in the distribution of income (or
more directly, consumption potentialities) cannot generally be said to participate as
fully in societal roles and functions as those in the middle and higher resource categories
do. It generally subsumes an absolute expert budget line, because the relativistic
standard is generally set higher than an absolute, economic deprivation standard budget
line would be.

Imagine that the poverty line is set as something between 5% and 95% of median
consumption expenditures. At some point in that array of possible poverty thresholds,
most of us are likely to feel uncomfortable about calling it a poverty threshold because it
is too high, and if it is set very low, we may question whether it really provides a decent
living standard. The NAS method of ‘finding’ the poverty standard is to look at the
distribution of consumption and to set a level of consumption within that distribution
below which an individual (or family) can be said to be poor, relative to others.

Although the NAS panel considered an absolute or expert consumption budget
definition, the NAS panel in the end chose to use a relative measure for a new definition
of the poverty threshold, namely a percentage of median expenditures on food, clothing,
and shelter, to be increased modestly to cover “other necessities” (the multiplier).
Although the panel did not recommend a specific threshold, they did suggest that it
reflect “the real growth in the standard of living that has occurred since the current threshold was first set in 1963”. The Panel recommended a range that was between the 30th and 35th consumption percentile of the Consumer Expenditure Survey’s median expenditures on food, clothing, and shelter plus a multiplier of 1.15 for other necessary expenses at the lower end of the range, and 1.25 at the higher end. (Citro & Michael, 1995, pp. 56-57).

Thus, the NAS chose a measure that it consciously knew would take into account the relative place of a person or family in the general distribution of resources (more accurately, the general distribution of the ability to consume at different levels) of the entire population, and turned away from the idea that a poverty threshold must be based on an absolute ‘expert’ budget determined as an absolute threshold of poverty. And the NAS standard ultimately defines a poverty threshold with reference to the entire population rather than by a basket of goods considered essential at some specified quantity by an expert. It looks at the actual consumption of real people. In support of this choice, the Center for Economic Opportunity, which was responsible for developing an NAS-based poverty measure for New York City commented in their report that described their experience in instituting the poverty measure that an adequate standard of living or income reflects social norms:

“[P]overty entails not only an inability to obtain a physiologically minimum level of consumption, such as enough food to avoid malnutrition, but also the inability to obtain a level of consumption that allows people to fulfill the social roles customary to children
or adults in a modern society. As society becomes wealthier and more technologically complex, the resources required to be successful at school and in the workplace, to be an able parent or informed citizen, all rise as well”. (The New York City Center for Economic Opportunity, 2008, p. 10).

These concepts for a poverty standard go beyond mere physical, material living standards and drift closer to a standard that takes into account an ability to function adequately in social life, beginning to incorporate an economic standard of the type that mattered to the economist and philosopher Amyrta Sen. The relativistic elements of the NAS standard consciously reaches for a broader standard of poverty that takes into account the fact that material things that are essential for living don’t tell the whole story. It isn’t enough to be able to get up and walk around. It is also important to participate in social roles, for example, and to be someone who functions and performs, as well as merely exists.

Similarly, the social scientist Peter Townsend indicated that “poverty is a dynamic, not a static concept”...and that “our general theory...should be that individuals and families whose resources over time fall seriously short of the resources commanded by the average individual or family in the community in which they live....are in poverty.” Economic deprivation under this approach is relative to the consumption and income of others. (Fogg, Sum, Mangum, Fogg, & Palma, 1999, pp. 28-29).
The relative poverty measure envisioned by the NAS is supported by the broader purview of man as part of a community needing to do things within that community that demand resources beyond what is needed to physically exist. This is an expanded version of the poverty threshold, much different than the one Orshansky had in mind or which is generally embodied in an ‘expert’ budget, and it tends to blur the difference between physical and higher-level needs (such as for social inclusion), to put it in Maslowian terms. Whether a society should be interested in making those distinctions if there are few resources for public assistance programs is a moral question. But it seems more and more difficult to argue that a conception of poverty that doesn’t contain some upward adjustment for things that people need to have to fulfill their social roles and expectations is a good enough one. The ideas of human fulfillment and the need for actualization and social membership have developed mostly since the early 1960’s when Orshansky originally took on the task of coming up with an expert budget. An expert budget that couldn’t take into account these human aspirations and needs seems too narrow to be used in the 21st century.

There are other reasons that an absolutist conception of a poverty measure that is embodied in an expert budget is not likely to be supportable as a national poverty standard, and these are related to the fact that expertise is rare and that experts often disagree amongst themselves. The specification of a consumption budget based on expert opinion of the essential items in a shopping basket of a poor person perhaps contains too many decisions that have to be made correctly in order to work. For example, how much variety is required in weekly meals to constitute the lowest cost
food budget possible? Which vitamins and minerals should be included and in what quantity should they be budgeted? What are responsible for the differences between the nutritional needs of one subgroup as opposed to another, and how can these differences be accounted for in a new system of poverty thresholds?

The NAS argued that “relative poverty thresholds are not so distinct as one might imagine from thresholds developed according to expert standards of need”, because “the latter also embody a great deal of relativity and subjectivity” (Citro & Michael, 1995, p. 32). While the New York City Center of Economic Opportunity argued above that relativity and social roles and norms need to be kept in a poverty definition, the NAS argued it was impossible to keep them out of it, anyway.

Skeptics could argue, however, that though expanded concepts of need and deprivation may very well have a place in ‘decent’ living standards that intend to pull in concepts such as social functioning, it pollutes the purity of a notion that seeks to determine what is essential for physical or biological functioning. This distinction is important because the defense of social programs designed to keep people physically functioning may not be the same as for programs that furnish people with something more, such as a sense of self-esteem or the value (for everyone in the society) of belonging to a society that takes pride, say, in decreasing inequality among its members rather than merely guaranteeing a level of subsistence for all of them.
But the absence of the ability to do a true absolutist rendition of a poverty measurement due to the differences between people’s consumption needs and habits seems to make the use of a relativistic measure essential, and the use of the NAS’ consumption baseline identifying people as poor who occupy the approximately lower third or fourth of the median consumption budget range seems to offer a realistic expression of a level of expenditure that approximates basic needs, or at least shadows the needs of a minority of households that is living on quite substantially less than the ‘average’ (technically, median) and which constitutes a reasonably objectively identifiable group at the bottom of a society as a fit subject for social support or at least concern. The ultimate rejection of an ‘expert budget’ by the NAS was also partly based on that expert method’s failure to be an objective process. A relative poverty measurement takes the subjective expert out of the equation arguably in order to achieve a higher level of objectivity:

“To decide, for example, that a minimally adequate diet must include meat as well as rice and beans and how much of each foodstuff, or that a minimally adequate house or apartment must include at least one bedroom for every two children, is to make a set of judgments that are inevitably influenced by the mores and experiences of the expert” (Citro & Michael, 1995, pp. 107-108).

All in all, however, the argument that the type of NAS relativistic standards has a better chance of describing the more modern notion of poverty – which takes into account needs which cannot be expressed entirely as necessarily materially necessary to live – and which can be approximated (not ascertained, surely, by experts) by designating a
portion of the distribution of consumption below some portion of the population’s consumption budget as indicating a poor standard of living, seems clear. Even if the official poverty standard were brought up to date as a true expert standard, it would suffer from a failure to acknowledge that part of the notion of poverty is the place one occupies in one’s society, which defines one’s relative ability to achieve one’s role and social purposes. One can argue over where that place in the distribution of poverty is, but not that one’s place in the distribution doesn’t matter as an important indicator of one’s living standard. The NAS or similar relativistic standard of poverty seem preferable in view of its ability to capture a broader notion of basic consumption needs and a broader understanding of the true result of poverty – occupying a place in society that has significantly reduced means for seeking or attaining what that society and oneself would define as a good life.

For a more detailed explanation of the NAS method, please see Appendix A.
In general, the NAS poverty measure describing the percentage of households living in poverty is significantly lower than the official poverty measure for the 18-24 age group and higher for the age 65 and older group. If the NAS measure is a better one, then it also provides a more accurate estimate of the true poverty standing of the elderly, and it shows that the official poverty threshold understates the poverty rates of the elderly. The following presentation (Figure 3) presents the NAS threshold and resource definition for poverty measurement based on the general discussion above and the more detailed explanation in Appendix A, alongside the official Census Bureau poverty measurement, based on the official poverty budget and resource definition.  

**FIGURE 3: COMPARISON OF OFFICIAL AND NAS POVERTY RATES**

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3 The presentation uses Census Bureau data and tables, some of which are based on NAS-defined experimental definitions of poverty, which are contained in this website: [http://www.census.gov/hhes/povmeas/data/nas/index.html](http://www.census.gov/hhes/povmeas/data/nas/index.html)
What causes the differences between the NAS methods of poverty measurement compared to the official Census Bureau method, particularly the significantly higher levels of poverty for those over age 64 using the NAS method as compared to the official poverty method?

For one thing, medical costs are not subtracted from the available resources and are not included as a separate category in the threshold basket of necessary expenditures in the official Census Bureau method. In effect, medical expenses don’t ‘exist’ under the official poverty method (they are not part of the expenditure budget and do not decrease money income resources that are considered to be available to pay for expenditures) and therefore elderly expenses for medical costs cannot ‘register’ in this type of measurement. On the other hand, the NAS method reflects these expenses, which constitute a high percentage of expenses for the elderly (as we will see in Chapter 2 under ‘Consumption’), and the effect is to increase the poverty rate of the elderly, as computed under the NAS measure. The NAS method decreases the available resources by the cost of medical services, while the official poverty rate does not reflect these expenses.

In addition, children under the age of 18 are provided an adjustment downward in the equivalence scale used in the NAS thresholds, which may be a partial cause of the difference between the 18 to 24 age group’s poverty rate using the official method and its poverty rate using the NAS method (both groups have about the same rate of poverty using the official threshold). Similarly, using the NAS method, people over age 64 do not
have a separate equivalence scale adjustment that posits lesser material needs for older people in its standard, as in the official poverty measure using the Census Bureau’s methodology. This difference also pushes the poverty rate for the over-64 age groups up using the NAS method. (Dalaker, 2005, pp. 8-12).

Subtracting the costs related to working – which is reflected in the NAS method but not in the official poverty threshold - tends to increase the poverty rates for families with working adults, while accounting for the earned income tax credit (which is taken into account using the NAS method, but not using the official method) tends to lower poverty rates for the same working families with children. Adding the subsidies for school lunch programs, food stamps and housing subsidies to income resources available for consumption tends to reduce the poverty rate from the official measure for families qualifying for those programs. Again, these adjustments to resources and expenses are made in the NAS method, but are not considered in the official method (Short, Garner, Johnson, & Doyle, 1999, pp. 1-20).

Nonetheless, one of the clearest differences between the two measures is that even with the much more inclusive definition of income used in the NAS method, that takes into account government transfer programs and tax subsidies, the elderly are clearly at a disadvantage based on the NAS income measurement for poverty. After age 64, elderly
poverty rates based on the NAS measure shoot up way past those of the official measure.  

In the end, the NAS methodology for poverty definition provides a better way to define a poverty line based on actual consumption choices of actual persons and a much more encompassing definition of income sources and nondiscretionary expenses than the official poverty measurement allows. The NAS method approximates a poverty line that moves with the general consumption standards of the overall population, and so it changes as the preference and costs of basic goods change in the general population. It therefore ‘reacts’ to changes in the general standard of living. It goes up as the population’s standard of living increases.

Nonetheless, the NAS’ setting of a relative standard of consumption at roughly 80% of the median provides a poverty line that is significantly below what half of American households actually spend on food, clothing, shelter plus another 25% of the sum of purchases in those categories to cover nonstipulated consumption items. The notion of ‘poor’ is reflected in the fact that the NAS poverty line encompasses a minority of the public which only has enough income to purchase significantly less than half of what most people can purchase. This is accomplished without the need to challenge too much

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4 As an interesting aside, the elderly (age 60 and over) account for 15% of all food stamp program (SNAP) participants who receive benefits for seven years or more, and only 5% that receive the benefit for one year or less. Nonetheless, the evidence indicates that only about a third of the elderly who qualify for the program actually participate in it. (United States Department of Agriculture, 2012, p. 16). Be that as it may, no such in-kind benefits are taken into account under the official poverty measurement, while they are taken into account using the NAS definition of income.
any expert—but necessarily subjective-notions of what is required to live a decent
material life, because an expert is not needed.

Finally, the NAS method has the capacity to adjust for expenses that are typically widely
divergent and specifically individualized for local family settings—including medical
and work-related expenses as well as geographical differences in prices. This is a sort of
technical rather than a theoretical improvement over the official measure, because this
notion could probably be incorporated into an expert budget methodology as well.

Relative methods for determining standards of living, which is a bedrock principle
incorporated into the NAS measurement of poverty we have just described, will be the
predominant ones used for the remainder of this paper, for the advantages they have for
capturing more accurately the relative state of individuals and families within an entire
national socioeconomic distribution, and because they tend to be the ones used for
international comparisons in existing literature and data.

WEALTH, THE MISSING COMPONENT

The elderly’s existential location at the end of their lifespan emphasizes their
dependency upon savings and defenselessness from their past decisions and
circumstances that affected the size of their current wealth. Regret, so useful at an
earlier time in the lifecycle for helping one change or correct course, is not much help at
age 70 or even 66. If you arrive at the beginning of retirement very poor, with no wealth,
there is not much you can do about it at that point, even if you are healthy enough to be able to work.

Thus, leaving liquidable acquired wealth out of the formula for determining poverty, whether using the official or an absolute ‘expert’ budget, or one similar to the relative NAS method instead, seems likely to provide a very incomplete picture of an elderly individual’s or couple’s true material condition. Income poverty has to take into account wealth in some way. Those with significant liquidable wealth are very obviously better off than those who have no wealth, but the official or NAS poverty threshold measuring income do not directly take wealth into account.

This fact needs to be considered as an encouragement to a better formulation of a poverty threshold or ‘sufficient income’ standard for the elderly. Wealth’s ability to be used as a source of income in retirement can be taken into account in other measures and models that depict the financial state of the elderly, and this ability is one that will not be ignored in this study, when we turn to look at elderly income and income sources as well as wealth in Chapter 2.
The Census Bureau has been very active in developing experimental poverty measurements over the years, both before and after the publication of the National Research Council’s recommendations. In 1999 it issued *Experimental Poverty Measures, 1990 to 1997.* (Short, Garner, Johnson, & Doyle, 1999).

This report compares different types of poverty measures that are substantially based on the NAS panel’s recommendations. However, the report also shows the result of defining the poverty measure using different points within the ranges recommended by the panel, and also provides alternative methods for applying the recommendations.

The Census Bureau modeled several equivalence scales and compared their measurements to the official measure. One measure, that was suggested by David Betson, is a three-parameter scale which attempts to take into account differences between one-adult families and two-adult families, by allowing the addition of a child to increase the one-adult family’s scale by more than the two-adult family’s. Betson, who was one of the members of the NAS panel, continues to develop enhancements to his equivalence scales. (Iceland, Rapporteur, 2005, pp. 12-13).
The Census Bureau also illustrated the use of the ‘Canadian’ scale, which decreases the threshold after the addition of the first adult by using ‘1’ for the first adult and ‘0.4’ for each additional adult. Each additional child increases the threshold by .3.

Finally, the Census Bureau provided a means to model a truly relativistic conception of income based on a percentage of median income. This is based on the Census Bureau’s own methods and tables, using a definition of poverty as 50% of the median income using NAS-based income (which deducts out-of-pocket medical expenses) and an OECD equivalence scale. This scale implicitly counts each adult in a household in addition to the original householder as one-half of a ‘householder’ and each child under the age of 14 as equivalent (in terms of threshold consumption) to 30% of a householder. This measure, too, shows the rate of poverty significantly increases with age after attainment of age 65.

II. THE OECD AND EUROPEAN UNION’S RELATIVE INCOME POVERTY MEASUREMENT

While the OECD countries do not share a common international definition of poverty, the OECD often uses a definition of 50% of the median level of income in each country for comparative purposes. The European Union uses as an official measurement of poverty the relative measure of one-half of national median disposable household income. (Silver & Miller, 2003, p. 2). Measures similar to these will be used especially in the international comparisons that are made in the third Chapter of this study.
A STANDARD OF SPECIAL SIGNIFICANCE TO THE RETIRED: THE
INCOME REPLACEMENT RATE

For purposes of determining the adequacy of retirement income programs, another measurement that will be frequently used in the remaining chapters is the income replacement rate, which is the ratio of post-retirement income to pre-retirement income.

The concern to be able to continue a lifestyle in retirement that is not significantly reduced from what one experienced in one’s working years is one that has secondary priority only to the concern to live above a poverty level standard itself.

Planning for retirement in a society that puts a significant level of the responsibility for retirement income provision on the individual really comes down to the serious game of individuals (and their spouses and families) trying to make adjustments in advance of retirement to ensure that the track of consumption does not need to take a precipitous fall at a time when there are few prospects to resist the fall through working and saving. Those actions are practically only available to the working young. The basic concern for the preservation of a lifestyle or living standard into retirement has traditionally been expressed as the ability to receive income in retirement that is at least equal to some type of pre-retirement income replacement rate and boils down to the following steps:
1. Determine the amount of pre-retirement income that you are trying to replace as a percentage of pre-retirement income. If one has earned $100,000 on an after-tax basis and wants to receive 80% of that same amount in retirement, the ‘required’ replacement rate is 80% and the amount of post-retirement after-tax income required is $80,000.

2. Determine whether the amount of income to be obtained after retirement is sufficient to provide the stipulated percentage of the pre-retirement income.

The problems are really raised at the next level of detail: Here are some typical questions and issues designers of replacement rate and retirement income calculators have to grapple with, organized around each of the two steps mentioned above:

1. **Determine the amount of pre-retirement income that you are trying to replace**

   Is the amount of the pre-retirement income based on the year before the year of retirement or some longer period? What is the replacement rate we should be aiming for? At one time it was popularly 50%, and more recently 70% or 80% has been a ‘ballpark’ standard.
The concept of decreasing income needs in retirement is based on the idea that because transportation and clothing costs should go down, for example, and savings rates can also go down, less income needs to be available after retirement for consumption, and more of the available income can be directed toward consumption. However, some believe they will actually need more income in retirement than they have before retirement (for medical costs, for example). Replacement rates tend to be ball-parked higher (above 80%) than they used to be, out of recognition that living costs do not decrease very much, at least for many.

2. **Determine whether the amount of income to be obtained after retirement is sufficient to provide the stipulated percentage of pre-retirement income**

This part of the exercise has to take into account all sources of projected income, including income from retirement savings and retirement investments (whether through an employer-sponsored plan or otherwise) as well as from other income and investments.

To produce a viable number for projected income, one needs to forecast one’s remaining life expectancy, real rates of return on each investment (which requires other probability distributions for investment rates of return for different types of investments, using historical tables mixed with desired confidence intervals and risk/return trade-offs that must be calibrated to change
over the years of the forecast as the investment time horizon shortens due to the remaining life expectancy decreases), projected tax rates, interest rates, and other forecasting of the general economic landscape years into the future.

Fortunately, models for projected replacement income have been created by several well-respected financial institutions and researchers and some of them will be presented in Chapter 2 to gauge the level of ‘retirement-readiness’ for United States’ elderly subpopulations. Individuals interested in obtaining similar measurements for themselves can either obtain the services of a competent financial planner or experiment with the wide variety of retirement income calculators available on-line or in proprietary software packages.

NONFINANCIAL MEASURES OF WELFARE AND SECURITY OF PARTICULAR RELEVANCE TO THE ELDERLY

I. SOCIAL EXCLUSION

Social exclusion would seem to be a characteristic of poverty or deprivation of particular relevance to the identification of existent and potential harms to the elderly and retired. That the elderly’s increasing physical and mental incapacities make them more prone to physical and conversational or relational social exclusion at later ages is undeniable, but their being cut off from the workplace (as they are at retirement), ‘left of behind’ when their children move out their house and communities, ‘shunted aside’ by newer cultural developments, changes in style (whether of clothes, politics, or
philosophies) and ‘abandoned’ by ever-changing technologies and newer communities, makes them seem vulnerable at a thousand points to increasing isolation and disconnectedness from their ‘original’ (younger) communities, families, friends, and prerogatives. These exclusions are as important to find remedies for as economic deprivation itself.

In a 2008 research project using structured interviews of government representatives, NGO (nongovernmental organizations) and voluntary sector representatives, and “independent experts” covering the 25 European Union countries, social exclusion of the elderly was associated with relative poverty. However, social exclusion was also connected with rural areas lacking in healthcare facilities and long-term care infrastructure, or in which the lack of adequate public transport made the use of healthcare facilities difficult. Rural areas nonetheless provide better protections against social isolation overall, because making and keeping social networks start with making social contacts. The differences between countries in terms of which subpopulations of the elderly tended to experience social exclusion were wide, and seemed to be significantly affected by public policies supporting pensions, longer working lives, and some very direct and innovative experiments to decrease social isolation. (Hoff, 2008, pp. 21-37).

Countries which have tried to diminish social exclusion for the elderly, in other words, have managed to diminish it, a lesson the United States can take back to its own policymakers. As we will see in the next chapter, too, single elderly are prone to considerably less retirement security than married elderly, and have higher rates of
poverty than married couples. Getting and keeping people together both decreases their economic difficulties and increases their overall morale and sense of purpose. Programs to reduce the isolation of retirees can only increase their chances of living more healthy and fulfilling lives. For our purposes, however, this concern must remain substantially unaddressed in this paper, which is focused mainly on retirement income institutions and their potential for improvement.

II. HEALTH RISK FACTORS

Important measurements of elderly welfare must include both physical and mental health factors and having an understanding of how these are related to demographic characteristics may be helpful to improving targeted interventions.

For example, are there relationships between advancing age, gender, and income on the health of the elderly? Which of these seem more crucial and how much can each of these independent variables explain?

III. PHYSICAL FUNCTIONING MEASUREMENTS

If self- and societal- assessments of the good life have a moral place in the later phase of an individual’s life schedule, then it suggests an index of well-being for the elderly should include several criteria based on values that would be especially meaningful to the elderly as well as informational to a just society.
One of the measurement yardsticks that has been used especially for the elderly that would seem to satisfy these criteria might be the Katz Index of Activities of Daily Living. This is a performance – based measurement of independence, namely of 6 functions of daily living which include bathing, dressing, toileting, transfers from bed to chair, continence, and feeding. The highest reading on the scale is obtained by those who are able to perform all 6 functions completely independently, and lower scores are obtained as dependence on others in any of those functions is necessary. The Lawton-Brody Instrumental Activities of Daily Living is a somewhat similar scale in terms of measuring performance, but rather than measuring independence in daily physical activities, it measures the extent of independence in one’s ability to perform activities necessary to maintain oneself in his environment. These activities include the ability to use a telephone, shop, prepare food, maintain the living environment (housekeeping), do laundry, travel, manage one’s own medications, and handle finances. Since the development of these original scales in the 1960’s, dozens of others have been introduced. (U.S. Department of Health and Human Services, 1990).

The Health and Retirement Survey contain scores of criteria related to these types of physical and environmental assessments, but in most cases, they are self-assessments and so may lack some of the objectivity gained from actual observation of performance.

The measurement in Figure 3 for ‘Nursing Home Stays’ is the proportion of respondents who reported a nursing home stay (of any length of time) in the previous two years. It is one example of a metric that indicates the absolute advantage of
marriage in one’s 70’s and 80’s. We will find more when we address income and wealth in Chapter 2.

![Reported Number of Nursing Home Stays in Previous 2 Years Per 100 Respondents, Age 70's and 80's, Couple and NonCouple Households](image)

**FIGURE 1: BASED ON DATA FROM HRS SURVEY, NINTH WAVE**

### IV. SUBJECTIVE SELF-ASSESSMENTS

The elderly’s own assessments of their health, welfare, and financial state, and their worries, concerns, and recent negative experiences are important indicators of their overall status from their own perspective and can also be used to discover trends over time that could be important in weighing the relative importance of alternative policy interventions.

A recent survey by the AARP and the Society for Human Resource Management (SHRM) asked for assessments of working conditions and safety concerns from workers who were at least 50 years old. Key findings include the following:

- Close to 80% of workers age 50 and older cite "financial reasons" such as the need for money or health insurance" as the primary reason for working or looking
for work. In other words, most older workers are not choosing to work for the pure enjoyment or from a desire to be productive, but because they need money

- 80% of older workers consider the availability of **health insurance**, **retirement plan**, and **paid time off** as important considerations in any decision to stay on a job or accept a new job (importance of these 3 ‘benefits’ diminished with age, especially after age 70)

- **Alternative work arrangements** such as flex time, phased retirement programs or compressed work schedules were considered very important by a majority of older workers.

The upshot of the survey is that retention or attraction of older workers necessitates competitive wages and benefits and/ or the provision of flexible work arrangements. (AARP and the Society for Human Resource Management, 2012).

Another example, this time of a periodic, subjective questionnaire, is the Retirement Confidence Survey that is sponsored by the Employee Benefit Research Institute. Startling and disturbing trends include the following assessment made by United States workers (of all ages) about their retirement prospects (from the 2012 survey published in March, 2012):
• Americans are **not confident that they can retire comfortably**. Only 14% are very confident they will have enough money to live comfortably in retirement (these are close to the historically low percentages reflected in the surveys since 2008, obviously affected by falling investment values and housing prices)

• 60% of workers report they have **less than $25,000 in savings** for retirement (this does not include the value of their homes or any defined benefit plan)

• 56% of workers are expecting to receive benefits from a defined benefits plan, while only 33% report that they and/or their spouses actually have such a benefit coming from a current or previous employer (this indicates another frequent problem with the general lack of knowledge that employees have about their retirement plans)

• Well over half of workers indicate that **neither they or their spouses have tried to calculate how much they will need to save for retirement** (indicating an overall lack of consciousness of their true lack of ‘retirement readiness’)

• **Less than 25% of workers and retirees obtained investment advice** from a professional financial advisor (indicating a bad decision on their part considering the general level of financial illiteracy amongst workers) (Helman, Copeland, & VanDerhei, 2012).
Another type of self-assessment that could be important to determining the likelihood of older workers to continue employment into their late 60’s and beyond is the extent to which health problems are seen to limit their ability to work. Respondents to the HRS Survey between the ages of 50 and 70, asked whether health problems limited the type and amount of paid work they could do, indicated that it was an increasing problem as they aged. It was also significantly more of an issue for women than men. (Author, based on 2009 HRS Survey).

ATTEMPTS TO MEASURE FAIRNESS AND EQUITY

Finally, we will sometimes try to measure, or at least be sensitive to issues related to, ‘fairness’ or ‘equity’ by the use of descriptive assessments of distributional equity or similar measurements in the assessment of current retirement income-supporting institutions. How and where elderly poverty occurs or income and wealth turn up in the overall distribution are just as important as understanding a summary of retiree welfare ‘on average’. Our interest in how well elderly support institutions are performing will sometimes require us to find out how our national retirement income security programs ‘target’ the elderly. If we as a society splurge huge benefits on certain subpopulations of the elderly but leave others out, for example, then that suggests it may be time to implement some important reforms.

Similarly, from the point of view of the income replacement objective of workers and retirees, it is important to determine whether there are insidious reasons for inequalities
in the availability of retirement wealth that can be used to fund retirement income at rates supporting a standard of living that is close to the one enjoyed during one’s working life. Lack of opportunity for saving, unequal access to retirement plans at work, poor financial literacy and other disadvantages in terms of either skills, knowledge or opportunities to build retirement wealth need to be evaluated and critiqued as socially contributing factors for any failing in an individual’s ability to maintain his or her pre-retirement living standard in retirement. These factors are as open to intermediation, adjustment or reform as any other factor that could be said to reduce the chances of an individual’s secure retirement.

CHAPTER CONCLUSIONS

We have discussed several types of criteria, including expert budget, relative income, and the capabilities approach in the course of this chapter as different perspectives on poverty standards. Between the relative and absolute measurements of poverty, we have tried to show the strengths and weaknesses of each. We gravitate toward the relativistic methods because they are capable of capturing a broader conception of poverty that includes notions of social functioning and, more generally, the ability to perform activities that are essential to a broader-than-material conception of human needs. The relative methods also offer an easier way to engage in international comparisons, since they do not rely upon complete international agreement on the use of ‘expert’ standards, as absolute measurements of poverty do.
Though Sen’s capabilities approach might seem to have the ability to get to the heart of what we are ‘really’ trying to measure - the ultimate ‘ends’ of human performance - its lack of comparability and its tendency to be better at focusing on the ‘little picture’ (people’s ability to function in certain ways) than the ‘big picture’ (the elderly’s ability to maintain themselves in a certain standard of living, for example) make it a difficult one to rely on in an effort that is aiming to describe a more general state of wellness or unwellness, capability or incapability, amongst the elderly.

In addition, though both financial and nonfinancial measurements need to be used to make a complete assessment of the elderly and the retired, financial assessments are necessary to determine material or economic states which are very broad criteria that can be used to ‘sum up’ the overall condition of the elderly. These sorts of summations may not tell us as much about the particular performances of our subjects as the inclusion of interviews, self-assessments, and examinations using quality of life criteria, for example, might do. Nonetheless in the majority of our analysis, financial methods and models rather than nonfinancial ones would seem to be necessary due to the fact that we are dealing with a subject at the level of an overall or summary state which is approximated by measurement of an economic or material state. We realize, at the same time, that these financial measurements miss a lot of detail. In addition, we are to some extent forced to use such ‘gross’ measurements because the data we have available for comparison purposes, both within the elderly subpopulations of the United States and in our international comparisons, use primarily financial data.
While we make these apologies for our use of financial and summary standards, however, let us defend their use in one way further. For all the benefits of exploring the ability for the elderly and retired to achieve certain performance or functioning standards, our focus on the 'big picture' is for the purpose of examining the performance and potential reform of social institutions that are designed to support the elderly, and these are primarily economic institutions. Social institutions such as Social Security and the private pension system have to be evaluated on the basis of what they are designed to provide – income to the elderly, and that is measured in dollars and cents, and in terms of sizable populations and subpopulations.

What the elderly do with that income and how well it helps the elderly to achieve their professed purposes and functionings in the sense that Sen discussed them must remain beyond the realm of this study, though those questions are no less important than the ones we attempt to answer here.
APPENDIX A: AN ILLUSTRATION OF THE NAS RECOMMENDED POVERTY MEASUREMENT

POVERTY THRESHOLD

Taking the more detailed NAS recommendations into account, the poverty threshold employed in the following presentation represents a percentage of the median annual expenditures for the NAS recommended prototypic family of 4 persons (two adults and two children) from the Consumer Expenditure Survey, plus a small multiplier. This figure is later adjusted for families of different sizes and makeup and families having different geographic residences.

The NAS recommended that a reasonable range for the food, clothing, and shelter categories should be between the 30th and 35th percentile of spending on those items according to the Consumer Expenditure Index. Note this is an immediate departure from a pure absolute poverty measurement. This is approximately 78% to 83% of the median expenditures on those items. The range for a reasonable multiplier, according to the NAS, was between 1.15 and 1.25. (Citro & Michael, 1995, pp. 151-152). For this presentation, the threshold is calculated as the midpoint of the upper and lower values of the percentages and multipliers suggested by the NAS:

\[
\text{Poverty Threshold} = \frac{(1.15(0.78)\text{median expenditures} + 1.25(0.83)\text{median expenditures})}{2}
\]
The poverty threshold for the 4-person family, before several further adjustments, as provided by the Bureau of Labor Statistics is as follows:

**NAS Poverty Threshold**

<table>
<thead>
<tr>
<th>Year</th>
<th>Official Threshold</th>
<th>FCSUM Threshold</th>
</tr>
</thead>
<tbody>
<tr>
<td>2007</td>
<td>21,027</td>
<td>27,744</td>
</tr>
<tr>
<td>2008</td>
<td>21,834</td>
<td>29,654</td>
</tr>
<tr>
<td>2009</td>
<td>$21,756</td>
<td>$29,602</td>
</tr>
<tr>
<td>2010</td>
<td>$22,113</td>
<td>$29,397</td>
</tr>
</tbody>
</table>

For those interested in more of the details of the following illustration of the NAS standard compared to the official standard of poverty, the following section outlines how this demonstration is derived. This corresponds to the Figure 3 illustration in the main text.

1. **POVERTY THRESHOLD ADJUSTMENT: EQUIVALENCE SCALE**

For purposes of the presentation that follows of the NAS method for determining the poverty standard, which is compared to the official national standard on the same graphic, the following scale is used, which was used in some of the Census Bureau’s alternative poverty thresholds developed around NAS recommendations.

For single-parent families:

\[ Adj = (A + 0.8A + 0.5C)0^{0.7} \]
This means that the number of adults’ consumption needs (‘A’s’) are added to the first child adult equivalent (80% of ‘A’ s adult consumption needs) and then additional children’s consumption needs are added as \( \frac{1}{2} \) of the Adult needs plus their portion of the raised power of family consumption needs, namely 0.7.

Two-parent and other families do not have the special term for the first child (‘0.8A’), but are otherwise identically formulated. (Short, Experimental Poverty Measures: 1999, 2001, pp. A-2).

2. POVERTY THRESHOLD ADJUSTMENT: GEOGRAPHIC PRICE VARIABILITY

While the NAS regretted that there were no cost of living indexes related to the consumer price index, it did think it was important to vary the poverty threshold for differences in prices between different areas of the country as much as practical. The NAS believed it could adjust at least for housing costs until new statistical data could be developed so that all consumption goods in its threshold could be adjusted for geographical differences in prices.

The resulting indexes used in experimental Census Bureau measurements (as well as the presentation that follows this section) are based upon fair market rents for Housing and Urban Development programs. There are 100 different indexes, two per state representing metropolitan and nonmetropolitan groupings, with the exception of New Jersey and DC indexes which only use metropolitan groupings. These fair market rents are set at the 40th percentile for rent distribution for standard quality homes in the geographic area. (Short, Experimental Poverty Measures: 1999, 2001, pp. A-4 - A-5).

3. RESOURCE DEFINITION

The NAS posited a rather expansive definition of resources (sources of income) which have never been counted in the official United States poverty measure. The NAS explained that they were concerned with keeping a consistency between the budget threshold, which was composed from a budget for food, clothing, and shelter plus an additional small amount for other necessary consumption, and the actual resources available for expenditures on items in the budget.

In order for the resources to match up with the consumption/poverty threshold, those resources had to be understood as being available only for purchases of food, clothing, and shelter plus the additional amount.
That partially explains why important consumption items not included in the threshold budget, such as medical costs and expenditures that are necessary in order to work (including transportation and child care expenses) reduce the resources available for the purchase of food, clothing, and shelter plus the additional amount in the NAS measure.

The fact that this is only a partial explanation is due to the fact that reducing resources available was just one way of accounting for these expenses. An expense budget for each of these expenses, instead, could have been made part of the overall threshold budget. In general, one of the reasons for not including certain expenditures in the budget was the inadequacy of the data. It would have been difficult to come up with an answer to the question, ‘What is the poverty level for this item’ either by authoring an expert budget or by using a sampling of actual purchases, such as from the Consumer Expenditure Survey. (Citro & Michael, 1995, pp. 206-235).

“Gross money income” was recommended to be used in the NAS poverty measurement, which includes income from all private and public sources of income. Food stamps, housing subsidies, school lunches, and other governmental assistance programs such as Social Security, Medicaid and Medicare that provided either cash or in-kind benefits were aggregated with personal services income from sources of compensation from working and from owning a business. In addition, earnings from investments, realized capital gains, and pension income were added to resources to come up with the broadest list possible of available resources. (Citro & Michael, 1995, pp. 203-210).

4. RESOURCE ADJUSTMENT: MEDICAL EXPENSES

The NAS pointed out that medical expenses were a large and increasing portion of the family budget and considered including them as a separate category within the threshold expenditure budget - along with food, clothing, and shelter. The panel decided against this in the end, based on the fact that medical expenses were such an unpredictable variable from family-to-family and year-to-year that there would be no way to provide a standard threshold applicable to every family every year. The NAS instead suggested that actual medical expenses paid ‘out-of-pocket’ be used to decrease the resources otherwise available to purchase the items in the threshold consumption bundle of goods (food, clothing, shelter plus a little more). The presentation in Figure 2 subtracts out-of-pocket expenses from the resource base as suggested by the NAS, but using a sophisticated model of those expenses.5

5Short explains the medical out-of-pocket expenses are based on an estimated model that captures whether a family incurred out-of-pocket medical expenditures during the year, the amount of those expenditures, and imputed Medicare Part B premiums (which Medicaid pays only for low-income elderly). (Short, Experimental Poverty Measures: 1999, 2001)

80
5. RESOURCE ADJUSTMENT: SHELTER COSTS

The NAS suggested that differences in economic resources amongst families should acknowledge that households with low or no mortgage payments do not have the same costs as renters and therefore should either have a rental “equivalence value” added to their income, or should have the threshold lowered so as to reflect the fact that the shelter component of their budget was less than the renter’s. It concluded, however, that there were insufficient data, at the time the Report was issued, with which to make well-grounded adjustments for rent imputation. (Citro & Michael, 1995, p. 71).

The presentation, however, does impute estimated rental expenses for homeowners and added net return to home equity to resources as “implicit interest income”, based on Short’s recommendations. (Short, Experimental Poverty Measures: 1999, 2001, p. 11).

6. RESOURCE ADJUSTMENT: WORK-RELATED EXPENSES

The NAS suggested using the Survey of Income and Program Participation (“SIPP”) to obtain data for child care expenses for parents who were working. SIPP is a survey sponsored by the Census Bureau, which collects income data that is relevant to poverty and resource measurement. It is also a longitudinal survey that follows households even as they move geographically.

Child care expenses are treated as deductions from resources otherwise available toward the poverty budget. These expenses would be limited to the earnings of the parent who earned the lowest (if the expenses were more, then it would presumably not make ‘sense’ for that parent to work), or to the dollar amount of the dependent care tax credit, whichever was

---

6 Short explains the adjustment in (Short, Garner, Johnson, & Doyle, 1999, pp. C-20 - C-23). Rental values for owned homes are estimated based on regressions on explanatory variables representing housing characteristics related to actual rental expenses for comparable rental units. The imputed interest income is derived from the home’s estimated ownership percentage multiplied by its market value multiplied by the average rate of return on high-grade municipal bonds.
In the model used for the demonstration in Figure 3 of the main text, an amount is subtracted from families that have no nonworking parents with children under the age of 12. A child under 5 has a higher expense limit. There were 6 separate medians computed for child care and nursery school costs based on estimates from CPS data, with variances depending upon the number and the age of children.

Other work-related expenses which the NAS panel recommended to be subtracted from the resources available to spend on the poverty level consumption budget included transportation costs. The presentation uses SIPP-based (Survey of Income and Program Participation, a governmental survey) estimates for annual work-related expenses (including union dues, licenses, permits, tools and uniforms); mileage expenses, and other commuting expenses such as bus and parking costs, also as explained by Short. (Short, Experimental Poverty Measures: 1999, 2001, pp. A-5 - A-9).

### 7. RESOURCE ADJUSTMENT: TRANSFERS AND TAXES

Government benefits such as food stamps and housing subsidies were considered as important resources that should be considered as reducing other income needs by the NAS. These represent other resources that can be used to meet the family’s needs for consumption.

The NAS definition of resources starts with money income, which is the sole source of income used in the official US poverty measure. However, benefits (cash or in-kind) benefits are added and taxes are subtracted in the NAS measure. So sources of income such as unemployment compensation, worker’s compensation, housing subsidies, Social Security payments, veterans and public assistance benefits, and of course all forms of compensation and investment income, are included in the NAS definition of income (see above). But tax payments are used to reduce the income available for expenditures on the threshold categories (food, shelter, clothing plus a little more) in Figure 3 of the main text.
# CHAPTER 2

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INTRODUCTION

The purpose of this chapter is to come to an understanding of the economic state of the elderly in the United States in detail by examining the major components of income, wealth and consumption that are especially important to Americans as they enter and live through their years of retirement.

Answering such questions as ‘What are the sources of income?’ and ‘What are the sources of retirement wealth’ and, ‘What are the most important expenditures for retirees’ provides the necessary background for observing the qualities of performance of the two main components of our retirement income security system: Social Security and the private pension system, against the actual challenges to income sufficiency of the elderly. Together, these are the main targets for adjustment or reform in the event that the economic state of the elderly – or, at least, significant subpopulations of them - is determined to be inadequate.

Unfortunately, this chapter will prove that significant percentages of the elderly are likely doomed to live a retirement not of their dreams, but of their diminished dollars.
This chapter will show that there are significant subpopulations of the elderly retired who are, or are likely in the future to be, suffering from insufficient income either to keep their heads above poverty or to extend their working years’ standard of living into their retirement years. Some will be suffering from the need to continue to spend money on important expenditures – such as for medical services – that are more than their means allow, and who have insufficient wealth to provide themselves with a sense of security for the decades of retirement they may have ahead of them. The chapter will end with a relatively dour assessment of the prognosis for many retired citizens under our current retirement income security system due to insufficient income or wealth, before stepping aside for a third chapter that includes a comparative analysis of national retirement income security systems amongst some other advanced industrial countries. In that chapter we will try to determine whether our system compares to other national retirement income security systems with a more positive result.

This chapter is divided into 6 major sections, three of which correspond to income, wealth and consumption. However, employment is of such importance to income and wealth that it earns a separate section. In addition, the interaction of income and wealth – which are different forms of the same thing, each both the source and outcome of the other – also earns a separate section. This fifth section engages in a brief examination of models that incorporate wealth and income, and in some cases, consumption, in an aggregated assessment of elderly income security.
The sixth and final section provides a general evaluation of the state of the elderly and the retirement income security institutions of the United States. It summarizes the previous materials to provide a conclusive as to the adequacy of the present institutions, and concludes that significant improvements may need to be made.

The six chapter sections are introduced in more detail below.

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**I. SOURCES OF INCOME**

The particular financial data which is examined starts with the peculiar sources of income which are most significant to the elderly. The ‘story’ those sources ‘tell’ about the condition of the elderly when they are examined with reference to different levels of household income and with reference to increasing age brackets provides insights both to what makes the elderly different from the rest of the population and also how their financial circumstances change as they pass into retirement.

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**II. PROBLEMS OF EMPLOYMENT FOR THE OLDER WORKER**

Because one cannot talk about elderly security and elderly income without noting the importance of compensation income, from which both current consumption and retirement savings largely derive, and because it is important in current policy discussions that emphasize the extension of the retirement age as a means of lengthening the years in which older workers could continue to both earn compensation...
and save some of it for their retirement, there is a separate section on employment issues that affect older workers. This section could be seen as a subsection to both income and wealth, as it is a source for both.

III. SOURCES AND USES OF ELDERLY WEALTH

Wealth is an important subject to the elderly, as it is related to the ability of the elderly to liquidate assets (savings) in order to produce retirement income. Going into retirement without wealth means being subject to an income stream whose sources are limited generally to Social Security.

The uneven distribution of wealth, both in terms of retirement savings wealth as well as other sources of asset wealth, forces the question whether the current social support system for the elderly, which, again, is the combination of the Social Security system and the private pension system, is a fair one when we acknowledge the insufficiency of income it produces for many retirees. Most worrisome is the very low savings rates and retirement accumulations that exist for a significant bulk of workers who are on the cusp of retiring.

IV. PATTERNS OF ELDERLY CONSUMPTION

The chapter then turns to consumption and questions how its patterns change as one grows older, and examines the major items of consumption that most impact the elderly, which include medical costs and their increasing importance in the overall consumption patterns of older Americans.
This section includes short discussions on the challenges of consumption that are particularly problematic and questions the adequacy of the programs which are directed at the expenditure problems the elderly face. Learning about the consumption patterns of the elderly can help in the understanding of the challenges to income sufficiency they face.

V. A BRIEF REVIEW OF THREE RETIREMENT INCOME SECURITY MODELS AND STANDARDS

Finally, different measures of retirement income security based mainly on income, wealth and consumption are presented and compared. Is there a consensus of agreement relating to the adequacy or inadequacy of income and wealth to fund a full retirement for current American workers and retirees? Exhibited and compared are key measurements from models which have been promulgated by some of the leading researchers in the field of retirement income. These models speak to the state of the United States elderly population in terms of how prepared or unprepared they are to face decades of retirement, during which time their wage income will gradually disappear, and when former workers will become dependent upon both Social Security and their retirement savings to ‘get them through’.

VI. CHAPTER CONCLUSIONS

The final section of the chapter focuses on the most salient points relating to the retirement income security problem that can be learned from the previous sections’ evaluations of income, wealth and consumption. Taken together, these points identify the parameters of the existing problem and direct us to first learn how other nations
have dealt with similar problems before evaluating alternative solutions in the final chapter.

 Sources of Income

Introduction

The relative contribution of specific income sources to household income varies along the lines of total household income as well as the age of the household. The following sets of descriptions trace out differences in the types of household income for a broad span of total household income categories in $20,000 intervals, and age categories as decades starting at age 50 and ending at age 90.

The method chosen to demonstrate the main trends and tendencies of household income and age categories is intended to help us to see the forest instead of the trees. Table 1 depicts only those sources of income that constitute at least 20% of total household income for each income range and age category.
Let us examine each type of income, one-by-one, and see how its relative significance changes over the years and across the income categories.\(^7\) The income sources we are to show next are for married couples.

**EARNINGS**

By ‘earnings’ is meant wage compensation or self-employment income, and this constitutes mainly compensation earned by a respondent and spouse in a couple family for the first illustrations. Important in the over 50 and less than 60 age category, by the 60’s decade compensation has lost significance for those in the lower earnings categories, that is, those with household income below the $40,000 level. It remains important only in the $100,000 and higher income category in the 70’s decade, and then ‘disappears’ as a significant source of income entirely in the age 80-89 category. There is nothing to surprise here, inasmuch as the great bulk of older workers retire early during the 60’s decade, though those who continue to work into their 70’s are generally relatively high-income (with household income above $100,000, as shown in the table).

**CAPITAL INCOME**

Capital income is investment income from mutual funds, bonds, stocks, etc. Also not unexpectedly, it is a significant source of income across the entire age range only in the

---

\(^7\) Health and Retirement Survey ("HRS") data are used for the 2010 Wave except where otherwise indicated in this section.
highest category of household income (over $100,000). It does, however, dip down into the middle income categories at later ages as a significant source of total household income. It can thus be seen as a mainstay source of income mainly for the relatively well-off, but with increasing importance to the total income of those lower on the income hierarchy after age 70. In a word, as compensation earnings ‘leaves the field’ at older ages as a significant source of income, income from savings and investments helps to ‘take up the slack’ for those who have managed to save and invest during their active working years.

SOCIAL SECURITY

Now let us slow down and provide more specifics about those sources of income that become more significant to individuals at the later, post-retirement ages about which we are mainly concerned in this research project, and which flow from the most important retirement income security institutions in the United States, that is, Social Security and the private pension system. First, let us discuss Social Security.

As we move to the right in Figure 1, to the older categories, there is a trend that is impossible to miss. Starting at age 60, Social Security constitutes the only over 20% source of income for households with total income below $40,000, and remains a significant source of income for all but the highest, over $100,000 household income category, throughout the entire age range.
To bring back for a moment a tad more detail to these general observations about what happens to income as one ages and in terms of different total household income categories, it is worth noting that Social Security furnishes over one-half of total household income for households in which the respondent was between 70 and 79 years old for the $40,000-$59,999 income category, over 1/3 of total income for those households earning $60,000 and $79,999, and over ¼ of total household income for households receiving between $80,000 and $99,999 of income. (Health and Retirement Survey data, 2010).

This is tantamount to acknowledging that Social Security manages to be a ‘middle-class’ entitlement in spite of its overwhelming importance to the households with the very lowest incomes. In fact, it is not too strong a statement to make that it is due more to Social Security than any other income source that households earning between $40,000 and $100,000 are able to maintain a ‘middle-class’ lifestyle, when we look more closely at these numbers. We find, for example, that for households with total incomes below $80,000, no other income source is larger than Social Security. Pension income challenges Social Security income for first place beginning only at the $80,000 income level, where both sources, separately, are responsible for about 28% of total income. Even in the $80,000 to $100,000 range, Social Security brought in nearly $25,000 of the total average of nearly $90,000 of household income for those between the ages of 70 and 79.
**FIGURE 2: 20% OR MORE INCOME SOURCES BY AGE AND TOTAL HOUSEHOLD INCOME**

(BASED ON 2010 HRS SURVEY, 10TH WAVE, MARRIED COUPLES)

<table>
<thead>
<tr>
<th>Total Household Income</th>
<th>Age 50-59</th>
<th>Age 60-69</th>
<th>Age 70-79</th>
<th>Age 80-89</th>
</tr>
</thead>
<tbody>
<tr>
<td>$0-$19,999</td>
<td>Social Security, Earnings</td>
<td>Social Security</td>
<td>Social Security</td>
<td>Social Security</td>
</tr>
<tr>
<td>$20,000-$39,999</td>
<td>Earnings</td>
<td>Social Security</td>
<td>Social Security</td>
<td>Social Security</td>
</tr>
<tr>
<td>$40,000-$59,999</td>
<td>Earnings</td>
<td>Earnings, Social Security</td>
<td>Pension, Social Security</td>
<td>Pension, Social Security</td>
</tr>
<tr>
<td>$60,000-$79,999</td>
<td>Earnings</td>
<td>Earnings, Social Security</td>
<td>Pension, Social Security</td>
<td>Pension, Social Security, Capital income</td>
</tr>
<tr>
<td>$80,000-$99,999</td>
<td>Earnings</td>
<td>Earnings</td>
<td>Pension, Social Security, Capital income</td>
<td>Pension, Social Security, Capital income,</td>
</tr>
<tr>
<td>Over $100,000</td>
<td>Earnings, Capital income</td>
<td>Earnings, Capital income</td>
<td>Earnings, Capital income</td>
<td>Pension, Capital income</td>
</tr>
</tbody>
</table>
Thus, losing the source of Social Security would mean economic deprivation for those in lower income brackets, but losing the source of Social Security for those households earning between $40,000 and $100,000 would mean a very precipitous drop in their material circumstances.

Social Security would therefore seem to be the leading ‘actor’ in providing both the basic floor of retirement security for the lower-income and a very significant boost to total income for all wage earners with less than $100,000 of household income. The distribution of its effects on supporting retirement income across the low-to-mid income levels is unrivalled by any other source.

---

**PENSION INCOME**

Now let us take a close look at the other significant retirement income security institution and determine what age and income categories it tends to benefit.

Pension income is absent as a significant income resource for age 70 and older households living on less than $40,000 of income, and is a significant source of income for all other age 70 and older income categories with the exception of those who are fairly young and who continue to work (age 70-79, income above $100,000). Those particular households are apt to hold off from accessing their pension income until after they have stopped working, at any rate.
Although this may not have been a surprise, it is important to acknowledge the fact that pension income is not a very significant source of retirement income except to those with incomes which are generally thought as being ‘middle-class’ or above. If it became obvious in the last section that Social Security was an income source that was significant across the entire spectrum of income categories, except for the quite well-off, pension income is a source that can be seen as one that is much less democratic in its distribution.

(Note: Both the HRS survey and the CPS survey (the Current Population Survey is sponsored by the Census Bureau), which is used as the basis for some of the Social Security Administration data on the incidence of income sources that are discussed later in this section, do not capture distributions from retirement accounts (including 401(k) and IRAs) that are not paid periodically. (Social Security Administration, 2012, p. 14). This means that distributions that are paid in a lump sum may not be captured in these income sources. However, the Social Security Administration published a bulletin that indicated that most of the undercounting of these retirement distributions occurs in the highest income quartile. For families of persons aged 65 and older, retirement account distributions in 2009 occurred in 24% of families in the highest income quartile and only 8% of the lowest quartile. The mean and median distributions were over $10,000 and $4,200, respectively in the top quartile and $5,283 and $2,200 in the lowest quartile for those who received any distribution at all. For this reason, the undercounting of retirement distributions will generally have a negligible impact on income sources and incidence for the purpose of the comparisons made in this section,
though it should be kept in mind that pension distribution data is slightly understated. (Iams & Purcell, 2013, pp. 78-81).

In addition, information we later present in the ‘wealth’ section of this chapter which is based on Survey of Consumer Finance data will demonstrate the low level of retirement savings currently held by lower-income groups, which supports the conclusion that income from retirement account distributions is relatively insignificant except for those at higher income levels.)

---

**PENSION INCOME AND CAPITAL INCOME**

There is one further fact that we need to acknowledge if we are to glean a more complete picture of income sources and how they differ across the household income categories. For this, we need to combine our observations on pension income and on capital income.

Pension income, as we have seen, is a significant source of income for those with total household incomes above $40,000. Capital income is a significant source of total income for those age 70 and older only in the higher income categories, namely those with total household incomes above $80,000 (although it is also significant at higher ages in the $60,000-$79,999 income category).
What do these observations about the sources of income for the higher-income retirees mean? Certainly, it is fair to say that pensions and capital income are mainly what separates those fortunate households receiving at least $40,000 from those with lower total household incomes after retirement. This statement becomes even truer at higher income categories.

In Figure 2, the importance of pension income and capital income to higher-income households is represented by the ratio of the sum of them to total household income, which we will call the P & CI/THI ratio (Pension income and Capital income to Total Household Income ratio). These two sources constitute from one-third to one-half of total household income (depending on income strata) for households in which the respondent was between the age of 70 and 79, and from 40% to over 60% of total household income for older households.

From this summary we can deduce what mainly separates retirees into the ‘haves’ and ‘have-nots’: pension and investment income. What a retiree receives in pension income is a combination of what his or her employer has provided in the form of contributions and what the retiree as a worker and saver has provided in the form of his own contributions, most of which are made to workplace retirement plans. What a retiree receives in capital income is largely dependent upon the amount of work compensation he was able to not spend (in other words, save) and invest during his working years. Importantly, both sources of retirement income are dependent upon a work relationship and a relatively benign set of circumstances, namely: (1) sufficient wages to make
savings possible; (2) the existence of a company retirement plan and preferably, one in which the employer makes significant contributions, and crucially, (3) the employee’s habit of making frequent and significant contributions to his retirement or other source of savings and investments.

FIGURE 3: PERCENTAGE OF TOTAL HOUSEHOLD INCOME (HH) FROM PENSIONS (P) AND CAPITAL INCOME (CI) BY AGE AND AVERAGE TOTAL HOUSEHOLD INCOME (BASED ON 2010 HRS SURVEY, 10TH WAVE) FOR MARRIED COUPLES

<table>
<thead>
<tr>
<th>Age 70-79</th>
<th>Pension Income</th>
<th>Capital Income</th>
<th>P &amp; CI /HI Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average HH Income</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>$48,883</td>
<td>$11,475</td>
<td>$5,105</td>
<td>34%</td>
</tr>
<tr>
<td>$69,475</td>
<td>$20,107</td>
<td>$10,804</td>
<td>44%</td>
</tr>
<tr>
<td>$88,937</td>
<td>$24,874</td>
<td>$18,093</td>
<td>48%</td>
</tr>
<tr>
<td>$188,502</td>
<td>$31,800</td>
<td>$66,827</td>
<td>52%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Age 80-89</th>
<th>Pension Income</th>
<th>Capital Income</th>
<th>P &amp; CI /HI Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average HH Income</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>$48,897</td>
<td>$13,030</td>
<td>$7,726</td>
<td>42%</td>
</tr>
<tr>
<td>$68,890</td>
<td>$19,486</td>
<td>$13,893</td>
<td>48%</td>
</tr>
<tr>
<td>$88,409</td>
<td>$19,481</td>
<td>$20,826</td>
<td>46%</td>
</tr>
<tr>
<td>$155,218</td>
<td>$42,349</td>
<td>$57,449</td>
<td>64%</td>
</tr>
</tbody>
</table>

These basic conclusions, some might feel, potentially point to the time and place in which corrections to a retirement income policy that is felt to be inadequate could be addressed: during the working years, with the overall objective of building up a sufficient nest egg for every citizen to last through retirement. However, it is too early for professing correction or improvement, as we should first examine the income question from some other perspectives, including studying in more detail subpopulations of older workers and the retired. This could help us obtain insights that would have some utility in determining the importance of certain sources of income to
different classes and groups of working people and retirees and for identifying the more apparent gaps and potential for improvement. Nonetheless, as we begin to obtain a more well-rounded comprehension of retirement income sources we should keep in mind that our purpose is to understand any weaknesses we may discover in our current retirement income approaches so that we can become more proficient at targeting adjustments or reforms of our institutions later in this study.

**IMPORTANT DIFFERENCES BETWEEN MARRIED COUPLES AND UNMARRIED INDIVIDUALS**

The differences between couple and noncouple households in terms of total income and sources of household income might partially be expected from the realization that a single person has less of a chance of receiving a particular source of income than almost any married couple, because a married couple consists of two persons and the probabilities of each are added to determine the joint probability that at least one will have that source. Whatever the chance of a single person receiving private pension income, in other words, the chance that at least one of a married couple receiving it is going to be greater. And whatever a single person might receive from a particular income source, two people, in general, should receive more.

While the concept of household income may be problematic from the point of view of comparing households of different family configurations and sizes, it is generally assumed that spouses share a certain lifestyle and standard of living, no matter which
spouse is actually receiving a particular type of income. It is also generally understood that while a couple may not always be able to live as cheaply as one person, they can generally live on an income that is much less than what two persons, living in separate households, would require for an approximately identical lifestyle. Keeping these differences in mind between couple and noncouple households, it might be illuminating to see how couple and noncouple households occupying the same total household income brackets differ in terms of the average size of particular income sources. A major set of trends of the differences can be expressed by the following illustration comparing the income sources of units aged 60 to 69 in the lowest income category, and in one ‘middle’ income category within this age group.

At the bottom of the total income scale ($0-$19,999 of total household income) during the decade where most people finish working full-time and begin retirement, single (‘non-couple’) households can only attain the same level of total household income as their married counterparts by qualifying for higher Social Security payments, receiving higher SSI and SDI payments, and increasing asset and pension income, since most sources of compensation (mainly from working) for this very low income group has dried up.

As we move into the $40,000 to $60,000 income category, earnings compensation of the noncouple (single) household has to be roughly $20,000 more than the sum of the couple’s earnings in order to make up for the fact that there is only one earner, while the value of the pension must also more than match the sum of the married couple’s in
order to maintain the same income as the married couple. The lack of significant private pension income for the spouse in a noncouple household also translates into the need for greater capital income and government transfers for the single household to remain in the same income category as the married household.

These potential hardships on unmarried households are likely to continue and may be exacerbated by changing demographic trends that tend to diminish the relative quantity of married households. As evidenced in this section on income and income sources, there is an association between one’s marital status and one’s economic well-being. Unmarried oldsters have some definitive disadvantages. Official Census Bureau poverty rates for married persons over the age of 65 are much lower than those of widowed persons, divorced persons, or never-married persons, as well (Tamborini, 2007, p. 3).

Again, much of the differences in the amount of income that has to be earned through compensation by the noncouple household in order to achieve the same income category standard as married couples is related to the fact that there is only one earner, pensioner, Social Security recipient, and saver/ investor in the typical nonmarried household. That is why it is important to recognize that the single household is even more vulnerable to everything that can reduce any source of income than the couple household is. As long as both in a couple household are alive and living together, there are two sources of Social Security, more likely at least one source of pension income, an increased likelihood that there is some significant asset income, and a better chance that at least one member of the couple could qualify for government transfers. With only one
person constituting the household, the probability of the level of income falling down and far if the job is lost, the asset income used up, or the last of the pension is spent, is heightened. Figure 3 shows the difference in median income between married and single persons.

Though a full examination of this problem is beyond the scope of this paper, the message is either that seniors might be encouraged to marry or stay married, or that seniors (whether married or not) may do better if they ‘couple-up’ in their golden years.

**FIGURE 3: EXCERPT FROM SSA INCOME OF THE AGED CHARTBOOK, 2010 (P. 5). MONEY INCOME IS ALL INCOME RECEIVED BY THE AGED UNIT BEFORE DEDUCTIONS, AND DOES NOT REFLECT TRANSFERS (SUCH AS FOOD STAMPS) OR NONCASH EMPLOYEE BENEFITS**
Looking more closely at income sources for those age 65 and over also forces us to acknowledge some of the significant economic differences between racial groups in old age. As Figures 4 and 5, below, indicate, Hispanics, Asians, and Blacks are disadvantaged in terms of public and private pension coverage and in terms of asset income, with Hispanics being hardest hit in terms of all income sources across the board. Having less income sources generally means less income overall.

Figure 4: Married, 65 and Older

![Figure 4: Married, 65 and Older](image-url)
These differences are exacerbated when the comparisons are between married and single households (not shown), just as we would expect based on the last section on couples vs single income sources.

Finally, disparities in retirement income along the lines of both gender and race are shown in Figure 5A.

Again, focusing on particular subpopulations of the elderly is not meant to steer us away from the main objective of determining the most glaring weaknesses of the current retirement income security system in order to rectify them. But when we come to correcting any systematic faults of this system through public policy changes and adaptations or reforms of public institutions, it will be valuable to keep in mind that systematic socioeconomic discrimination that occurs in the working and pre-retirement years have effects that do not suddenly stop at the door into retirement. In fact, for a system like the United States’ that depends so heavily on individual savings and
investment to produce retirement income which can buttress Social Security’s basic retirement benefit, any subsets of the population that, for one reason or the other, have difficulty putting money away during their working years will be hit with the full weight of that problem when they can least be expected to do much about it – in their post-retirement years.

![Median Family Income, Age 65 and Older, 2010](image)

**FIGURE 5A: MEDIAN FAMILY INCOME FOR INDIVIDUALS, AGE 65 AND OVER (SOCIAL SECURITY ADMINISTRATION, MARCH, 2012), EXCERPT FROM ‘FAMILY MEDIAN INCOME VARIES BY SEX. RACE AND HISPANIC ORIGIN’ TABLE**

One final way to look at income sources is from the point of view of the relative contribution of different types of income to total income at different quintiles of income. This is depicted in Figure 5B.
FIGURE 5B: INCOME SOURCES FOR UNITS 65 AND OLDER, PERCENT (SOCIAL SECURITY ADMINISTRATION, 2012, P. 50) WITH ANY INCOME FROM SPECIFIED SOURCE

### Married, 65 and Older

<table>
<thead>
<tr>
<th>Sources</th>
<th>First Earnings %</th>
<th>Second Earnings %</th>
<th>Third Earnings %</th>
<th>Fourth Earnings %</th>
<th>Fifth Earnings %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Earnings %</td>
<td>10.1</td>
<td>22.9</td>
<td>38.5</td>
<td>55.3</td>
<td>75.7</td>
</tr>
<tr>
<td>Social Security</td>
<td>82.6</td>
<td>93.9</td>
<td>92.8</td>
<td>89.5</td>
<td>80.0</td>
</tr>
<tr>
<td>Public Pensions</td>
<td>4.4</td>
<td>10.4</td>
<td>25.3</td>
<td>30.5</td>
<td>31.0</td>
</tr>
<tr>
<td>Private Pensions</td>
<td>9.3</td>
<td>32.7</td>
<td>45.8</td>
<td>41.1</td>
<td>30.9</td>
</tr>
<tr>
<td>Income from Assets</td>
<td>33.8</td>
<td>56.0</td>
<td>65.1</td>
<td>76.5</td>
<td>87.6</td>
</tr>
<tr>
<td>Veterans Benefits</td>
<td>2.1</td>
<td>4.8</td>
<td>5.5</td>
<td>6.1</td>
<td>6.2</td>
</tr>
<tr>
<td>Unemployment</td>
<td>1.2</td>
<td>1.9</td>
<td>3.6</td>
<td>4.2</td>
<td>3.9</td>
</tr>
<tr>
<td>Worker Comp</td>
<td>0.0</td>
<td>0.4</td>
<td>0.7</td>
<td>1.0</td>
<td>0.7</td>
</tr>
<tr>
<td>Public Assistance</td>
<td>17.4</td>
<td>5.5</td>
<td>3.4</td>
<td>2.2</td>
<td>1.5</td>
</tr>
</tbody>
</table>

### Single, 65 and Older

<table>
<thead>
<tr>
<th>Sources</th>
<th>First Earnings %</th>
<th>Second Earnings %</th>
<th>Third Earnings %</th>
<th>Fourth Earnings %</th>
<th>Fifth Earnings %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Earnings %</td>
<td>3.5</td>
<td>5.1</td>
<td>8.8</td>
<td>20.8</td>
<td>44.0</td>
</tr>
<tr>
<td>Social Security</td>
<td>64.6</td>
<td>95.0</td>
<td>95.3</td>
<td>91.7</td>
<td>79.6</td>
</tr>
<tr>
<td>Public Pensions</td>
<td>1.2</td>
<td>2.9</td>
<td>7.7</td>
<td>19.4</td>
<td>28.5</td>
</tr>
<tr>
<td>Private Pensions</td>
<td>3.5</td>
<td>8.4</td>
<td>24.9</td>
<td>42.6</td>
<td>35.3</td>
</tr>
<tr>
<td>Income from Assets</td>
<td>15.5</td>
<td>27.1</td>
<td>41.8</td>
<td>59.4</td>
<td>74.4</td>
</tr>
<tr>
<td>Veterans Benefits</td>
<td>1.3</td>
<td>1.2</td>
<td>1.9</td>
<td>4.2</td>
<td>5.4</td>
</tr>
<tr>
<td>Unemployment</td>
<td>0.5</td>
<td>0.5</td>
<td>0.8</td>
<td>1.9</td>
<td>2.1</td>
</tr>
<tr>
<td>Worker Comp</td>
<td>0.0</td>
<td>0.2</td>
<td>0.3</td>
<td>0.5</td>
<td>0.6</td>
</tr>
<tr>
<td>Public Assistance</td>
<td>35.1</td>
<td>30.2</td>
<td>16.2</td>
<td>7.1</td>
<td>2.6</td>
</tr>
</tbody>
</table>

The income limits are as follows (based on 2010 data):

<table>
<thead>
<tr>
<th></th>
<th>First Quintile</th>
<th>Second Quintile</th>
<th>Third Quintile</th>
<th>Fourth Quintile</th>
<th>Fifth Quintile</th>
</tr>
</thead>
<tbody>
<tr>
<td>Married</td>
<td>0–$24,970</td>
<td>$24,971–$36,967</td>
<td>$36,968–$54,360</td>
<td>$54,361–$86,754</td>
<td>Over $86,754</td>
</tr>
<tr>
<td>Single</td>
<td>0–$10,037</td>
<td>$10,038–$14,525</td>
<td>$14,526–$20,433</td>
<td>$20,434–$34,417</td>
<td>Over $34,417</td>
</tr>
</tbody>
</table>

The Social Security Administration publishes the distribution of income using the sources of Earnings (compensation), Social Security, Public Pensions (for municipal and
state workers), Private Pensions, Income from Assets (investment income), Veterans Benefits, and 3 transfer programs, namely Unemployment, Workers Compensation, and Public Assistance. It needs to be kept in mind that these numbers represent percentages of households in each quintile that receive any form of the type of income in each row. Thus, private pension income is received by less than 10% of married households in the first quintile, and over 40% in the third and fourth, for example.

These sources bear out the conclusions already depicted by our earlier look at income sources, but in a slightly different way. Social Security is a nearly universal source of income across the income thresholds, private pensions are mainly the province of the wealthy, and asset income (savings and investments) is not even a minimal source of income for almost two-thirds of the married households in the lowest quintile of household income. They simply have none. (Social Security Administration, 2012, p. 50).

**PROBLEMS OF EMPLOYMENT FOR THE OLDER WORKER**

**INTRODUCTION**

Employment is of such interest to older as well as soon-to-be-retiring workers because it is largely wage and salary income that are the sources of the savings that provide income in retirement, especially savings in company-sponsored retirement plans. The corollary is that continuing employment into later ages, and not retiring until after the attainment
of the official Social Security full retirement age of 66 or 67, is a strategy for
strengthening one’s own financial security. This is because the ability to work into one’s
60’s or later is an important means of avoiding the necessity of having to tap into
whatever one has managed to save and invest for retirement.

In a word, working compensation is the primary source of retirement savings and thus,
second only to Social Security for most people, a primary source of retirement income
through the savings it makes possible. Work is simultaneously the primary means for
avoiding having to spend down that source of retirement income too soon. If one stops
working at age 60, he will have to bridge the gap in income until the Social Security
retirement age of 66 or 67, unless he takes early Social Security benefits, for example.
But if an older worker takes early retirement under Social Security, the actuarial
adjustment to his monthly payments will produce a significant reduction to the monthly
amount, so the rewards for continuing to work are multiplied for remaining in the work
force at least through the Social Security normal retirement age.

The crucial point is that whether one can be said to choose the time to retire, or instead,
that the exigencies of the economy, health of the worker, or other factors extraneous to
the worker’s preferences determine the retirement date for the worker, depends on
whether there is a viable way for an older employee to continue to work if he would
choose to continue. It is the main objective of the next section to consider the evidence
both in support of and challenging to that conception that older workers are the true
masters of their employment fate.
ARE LABOR PARTICIPATION RATES INCREASING FOR OLDER WORKERS?

Data show that, in spite of the longer-term historical trend that had seen the labor force participation rates of elderly men steadily shrinking at least since the middle of the 19th century, to below 20% at the beginning of the 20th century, the rate has been rising steadily since about 2000 (Figure 6). Not only that, but the most rapidly increasing labor participation rates are occurring in the sector of the labor force represented by workers (both men and women) over the age of 65.

These significant increases in the labor participation rates of older workers may be at least partly due to an increasing supply of older workers as the nation ages, and these older workers’ desire to shore up finances before entering retirement or to otherwise cover expenses. But Fogg and Harrington point out that employers have recently been actually substituting older workers for younger ones – showing preference to older workers. (Fogg & Harrington, 2011).
Older workers’ proportion of all workers employed in industries are increasing even as those industries shrink in terms of total employment. This is an unusually strong showing of the raw demand for older workers. Indeed, the employment trend between 2000 and 2011 in the largest metropolitan areas suggests that it was young adults and teens who experienced the worst effects of the Great Recession and its aftermath. (Sum, Khatiwada, Trubskyy, Ross, McHugh, & Palma, 2014, p. 1).

The Department of Labor noted in March, 2010 that in spite of rising unemployment rates, older workers continued to participate in the job market at an increasing rate. The DOL posited a number of theories for the increasing labor force participation rates of older workers, going back to the 1990’s, including the replacement of defined benefit retirement plans with defined contribution retirement plans. People may also delay their retirement in order to build up their balances in those plans, which are partially or
fully funded by their own contributions (Bureau of Labor Statistics, 2010). Another factor might be the decreasing presence of employer-paid retiree health insurance, persuading many older employees to keep working until age 65 when they can qualify for Medicare. (Purcell, Older Workers: Employment and Retirement Trends, 2005, p. 82).

These pieces of evidence support the conception of the older worker as having both reasons to continue employment, and considerable clout in determining for himself whether to continue to work or retire.

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**IS THE NEWS FOR OLDER WORKERS ALL GOOD?**

No, the news is not all good for older workers, based upon a mixed bag of experiences and trends in older worker employment.

For example, a long-term study found that the rate of withdrawal from the labor force of older workers who become unemployed generally was much higher than prime aged workers. Between 1986 and 2006, the withdrawal rate for workers aged 55-64 was approximately one quarter, compared to 10% of workers aged 25-54. Coile and Levine, the authors of this study, also found that retirement rates for workers aged 62 who became unemployed in the preceding calendar year was 25% as opposed to only 15% who were not unemployed in the preceding calendar year. The authors of that study
also found strong empirical support for the conclusion that individuals over age 62 with only modest educational attainments retire earlier if they become unemployed. Their rate of retirement is approximately twice that of college graduates. (Coile & Levine, 2010, pp. 93-98). This suggests that at least certain categories of older workers have difficulties finding work after a bout of unemployment.

Similarly, data from the Bureau of Labor Statistics indicate that the duration of unemployment since 2003 has significantly increased for all age groups. However, the differences between younger and older unemployed has widened since 2007 so that those age 65 and older in 2010 were likely to be unemployed for 29 weeks, over 36% longer than the average worker over 16 years old. Those in the prime retirement savings years, age 55 to 65, had it even worse, with a mean duration of unemployment of over 30 weeks, a tripling of the 2006, pre-recession rate. See Figure 7.

Figure 7: Based on data from the Bureau of Labor Statistics. Number of weeks of unemployment for workers age 65 and older and age 55 to 64, compared to younger cohorts of workers.
The upshot seems to be that older workers have been doing well in terms of holding their own in a difficult time of high unemployment. But if they lose their jobs, it takes older workers a long time to find another one, and many give up and look to early Social Security retirement at age as the only viable alternative.

In addition, not only is finding another job difficult, but based on recent data, finding a job sometimes only provides very limited relief. Weekly hours and wages often decrease substantially, especially those in the lower earnings categories. Based on one fairly recent study, for re-employed workers age 55 and older, the average decrease in weekly earnings was 38% for those living in households with less than $20,000 of income, and 28% for those living in households with between $20,000 and $50,000 of income. This was a combined result of working fewer hours and for a lower wage at the new job. (Sum, Khatiwada, Trubskyy, McLaughlin, & Palma, 2011, pp. 12-18).

Another phenomenon that especially impacts the older worker is the substitution of part-time employment for full-time employment. Based upon Bureau of Labor Statistics data describing differences between pre-recession 2006 and post-recession 2010, the portion of the labor force occupied in part-time work in the age 55 and older group hardly changed between 2006 and 2010 (28% in 2006 and 29% in 2010). However, the relative proportion of the part-time workers who would have preferred to work full-time more than doubled. 8% of workers over 55 in 2006 wanted full-time work but were working part-time. By 2010, 17% of the part-time workers in that age group would have preferred working full-time.
The 25-54 age group experienced a similar increase in the number of part-time workers who would have preferred working full-time over this time period, and this fact suggests that older workers may be in increasing competition with younger workers for both full and part-time work, making this part of ‘bridge job’ employment a more doubtful avenue for older workers seeking to phase in gradually to full retirement, at least in this phase of the aftermath of the recession. It also suggests that the availability of part-time jobs for people of all ages may have to wait until more older workers are able to find the full-time positions they seem to want.

Similarly, Sum et al found underemployment (workers working part-time when they would prefer to work full-time) affected 5% of the older employed workers (age 55 – 74), with this percentage negatively correlated with household income. (Sum, Khatiwada, Trubskyy, McLaughlin, & Palma, The Labor Market Experiences and Problems of America’s Low income Older Workers in Recent Years, 2011, pp. 9-10).

An important realization gleaned from these studies and tables is that one must continue to be skeptical that changes in the employment status of older workers necessarily reflects voluntary decisions, just as we saw in the case of the application for early Social Security benefits. In many cases, such as the increasing percentages of part-time work the elderly perform compared to full-time work, the changes are forced on them rather than being voluntary preferences on their part. While obtaining bridge jobs and part-time work may sometimes be voluntary decisions, at other times they
represent not choices, but the forced effects of the labor market on workers who are age 55 and older, which is particularly hard on them after a layoff.

AGE DISCRIMINATION IN EMPLOYMENT

To continue our analysis of some of the challenges that face workers over age 55, it might be helpful to divide the difficulties of older workers’ employability into two parts. The first deals with the problems inherent in aging which are evidenced in a particular case – problems that are related to the decline of abilities useful to many jobs or the act of performing some types of work. The second deals with problems associated with others’ – including employers’ and society’s – perception of the elderly as workers or potential workers. For our purposes, ‘reasonable’ discrimination is related to those factors associated with particular elderly people and their difficulty to perform actual available jobs, due to physical impairments or the lack of needed skills or education, for example. ‘Unreasonable discrimination’ is age discrimination in employment caused by incorrect assumptions, perceptions, or evaluations of older employees or potential employees, some of which may derive from negligent attention to the facts, and some of which may be a malicious attempt to circumvent commonplace notions of fairness on the part of employers and society in general.

Reasonable age discrimination is explicitly allowed under ADEA (the Age Discrimination in Employment Act). Concerns for safety, for example, may prohibit the hiring of an older person under some circumstances, and the fact that health insurance
costs may differ provide the employer with the ability to offer benefit levels for older workers that are less than those for younger workers, for example. (Neumark, 2008, pp. 6-7).

*Unreasonable* age discrimination is the focus of the ADEA. Passed in 1967, it provides elderly employees with a legal ground to stand on in order to oppose unfair policies in the employment and hiring of persons 40 years old and older. Its intentions are remarkably salient in addressing the special concerns amongst the elderly employed, in this age of constant technological advance and concerns for efficiency. Some older workers fear economic losses related to the decreasing value of their job skills in current labor markets, and any additional ‘headwinds’ against continuing employment are often

![Figure 8: Based on data from the U.S. Equal Employment Opportunity Commission](image-url)
enough to permanently sideline them into taking early retirement.

The ADEA is enforced by the U.S. Equal Employment Opportunity Commission. In examining the effectiveness of the ADEA recently, the AARP funded a study that found, based on the number of age discrimination claims filed with the Equal Employment Opportunity Commission, that there is continuing age discrimination and that there was no evidence that the ADEA has increased hiring for the older worker and in fact may have decreased it because of employers’ assessment of the greater costs of terminating these workers. However, because enforcement has focused on terminations (firings or layoffs of older workers), older workers may have an easier time staying with the employer into later ages, thanks to ADEA. (Neumark, 2008, pp. 9-16). In other words, ADEA is a mixed bag in terms of its behavior-altering effects on employers and the overall effects on older worker employment.

The Figure 8 presentation indicates that charges of discrimination in employment, including discrimination based on age, sex, disability, and age, increase during recessions in general.

There was an uptick in 2001, for example. There was also a significant uptick in discrimination charges in employment after the brief recession that officially began in

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8 Another important legal protection for older workers derives from the Age Discrimination Act of 1975, which prohibits age discrimination within programs receiving Federal financial assistance.
December, 2007 and lasted into June, 2009, and the uptick in age discrimination charges was particularly noticeable (see Figure 8, ‘Age’ and ‘Linear’ trend line). Further analysis of more specific data would be required in order to gauge the extent to which this is due to actual age discrimination or merely an increased sensitivity on the part of elderly workers of their rights not to suffer age discrimination, and their more active stance in trying to protect themselves from it. For now, the main point is that the effectiveness of the ADEA, while difficult to measure, is not generally claimed to have been an unmitigated success story.

OLDER WORKERS VS. YOUNGER WORKERS

Finally, we are confronted with the question of whether older workers are ‘crowding out’ younger workers as older workers attempt to work longer in order to reduce the length and thus the financial burden of their retirement years, and add to the number of working years available to save in preparation for retirement. A belief in such a ‘crowding out’ dynamic might cause employers and policymakers to promote disincentives to older workers for working in order to balance the burden of youthful unemployment.

A recent study by the Center for Retirement Research at Boston College, using Current Population Survey data, covering the years 1977-2011, indicates that younger workers actually experience a decrease in unemployment as older workers increase employment. A regression of hours worked by younger employees on the older workers’
unemployment rate also showed an increase in the number of hours worked by younger employees as older employees’ employment rate increased. These results were statistically significant for younger workers defined as those between the ages of 20 and 24, and for each of two groups of older workers: those between the ages of 25 and 54, and those between the ages of 55 and 64. Furthermore, there was a positive correlation between older worker employment rates and the wages of younger workers. (Munnell & Wu, Are Aging Baby Boomers Squeezing Young Workers Out of Jobs?, 2012, pp. 1-5).

The conclusions indicate that any hypothesis that older workers ‘crowd out’ younger workers is false. In spite of these findings, the ‘old crowding out the young’ theory has great popularity in some countries of Europe, and is not unheard of in the United States. If the notion were to gain popularity, it could help to generate stereotypes of older workers that would not be conducive to their prospects for continuing their employment into later years.

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**SUMMARY OF THE PROBLEMS OF OLDER WORKERS AND THEIR IMPACT ON INCOME**

In some ways older workers appear to be doing better than the average worker or young workers, in particular. Employment to population ratios were close to 76% for workers between the age of 25 and 54 in 2012, lower than the year 2000. But workers who were at least age 55 saw these same ratios actually substantially increase since 2000 when the ratio was 31.5%, to 38% in 2012. Unemployment rates for those 55 and older fell from a
high of 7% in 2010 to 6% in 2012. That was a full percentage point lower than workers between the age of 25 and 54, whose highest unemployment rate was at 8.6% in 2010 and in 2012 was down to 7%. (Johnson & Park, 2013, pp. 4-6).

To wrap up this section on older workers, it is perhaps best to try to offset some of the optimism for the continuing employment prospects for workers over the age of 55 with the empirical evidence researchers have found attesting to the difficulties for some subsets of older workers to provide a continuing source of compensation income as they attempt work into, and sometimes past, their mid-60’s.

1. First, the importance of earnings compensation to overall income is plainly seen in the previous discussion on sources of income in this Chapter. The tables on income indicate that personal compensation is the only source of income that provides at least 20% of total income for households supporting those between the age of 50 and 59, and for those between the age of 60 and 69, it is an over 20% source of income for those earning above $20,000, significantly augmented only by Social Security. Personal compensation determines which quintile of the income distribution one’s household occupies, to a great degree, even at older ages (60 and older). Any difficulties in continuing to work into their 60’s due to labor market conditions will endanger older workers’ ability to save for retirement and force them to take Social Security early, with permanent and significant decreases to their monthly payments. As indicated earlier, retirement policy really has to take into account employment policy because of the importance of employment for both compensation as a source for current consumption and as a source of retirement savings.
2. Secondly, older workers will take jobs that pay much less than their former jobs because they have to, they will take part-time jobs when they cannot find full-time jobs because they are the only ones available, and they will take temporary jobs when they cannot find permanent ones because working temporarily is better than not working at all. That is clear from the preceding literature review based on Bureau of Labor Statistics data. But that is not a picture of older workers that comports with an image of a bunch of older workers dallying around a worksite because they would otherwise be bored. Yes, some older workers may continue to work purely for the fun of it, but many more are desperately trying to find replacement jobs to support themselves and their spouses after having been permanently terminated from their old employers, and who are rapidly going through their savings.

3. Finally, the special problems of older workers are perhaps most significantly represented in the huge problems they have in finding new employment after a layoff and in the difficulties they have in surmounting employers’ attitudes toward elderly workers (even though some employers have some positive attitudes toward elderly workers, as were evidenced in the literature review). The duration of unemployment by age indicates that a layoff or termination is exceedingly difficult for older workers to recover from, and often leads to early retirement and early (and thus reduced) Social Security payments, evocative of an early retirement that is likely to be more often ‘forced’ on older workers than elected by them.
While our focus in this paper is on retirement income institutions rather than employment policies, there is no denying that national programs that have the objective of reducing older workers’ duration of unemployment and which make it possible for older workers to receive additional education through life and to retrain, and which help older workers to overcome some of the negative attitudes some employers have which impact older workers’ employability, will need to be considered and implemented as part of any national policy to increase retirement income. Nonetheless, these policies are beyond the major scope of this paper and will not be specifically developed in the final chapter.

CONCLUSIONS REGARDING INCOME (INCLUDING EMPLOYMENT)

It is time now to summarize the important conclusions of this section on Income:

1. ‘Sweat’ income, that is, compensation from working, constitutes the predominant source of income for married couples and singles under the age of 60 for all income categories, and supplies the source of retirement savings and a means of delaying retirement for those who wish to continue to work. Employment is therefore an important component of older worker and post-retirement income security because it supports workers who otherwise might need to retire prematurely, and because it is a source of retirement savings through employment-based pension programs (the private pension system), which as we have seen, is an important source of income particularly for the higher-income workers after age 60.
2. Retirement age is partially based on health and the availability of alternate sources of income, but is increasingly seen by older workers and by society as a whole as something that needs to be delayed at least into the mid-sixties (approximately when Social Security pays a full benefit) as a means of providing more time for retirement saving and to limit the number of years one has to draw down one’s retirement savings.

3. Older workers, while showing some resilience in holding onto their jobs in difficult economic times, nonetheless face significant hardships in returning to work after a layoff or termination. Specifically, older workers take much longer to find a job, and when they do, it is often for significantly reduced pay, hours, and benefits from their former job. The ability of older workers to remain in a job and recover after a layoff needs to be considered as part of any improvements to national employment policies that perhaps should not only be directed toward older workers, but also to the difficulties younger workers are facing in getting their first jobs.

4. Social Security supplies the bulk of the retirement income for the lower income households while also providing a significant means of support for all but the highest household income ranges.
5. Pension income is largely a high-income phenomenon that does little of significance to help those earning low and low-middle incomes in retirement. The private pension system mainly serves higher-income people, just as investment income (‘capital income’) is a significant source of income only for higher-income people.

6. The sourcing of income is dissimilar between single and unmarried households because the total sources of income are apt to be reduced for the single household due to the lack of diversification of income sources as well as income amounts that are related only to one earner or recipient, rather than two. In particular, never-married singles do not benefit from the potential to receive Social Security based on a (former) working spouse’s work and contribution history, and single individuals have much less of a chance of having a pension or capital source of income of any significance than married persons.

7. Women and racial and ethnic minorities exhibit significant disparities from white men in terms of income at all ages, and they have lower median household incomes than men and whites. These disparities are transferred from pre-retirement years to post-retirement years, and are reflected in retirement income inequalities. This is an inequitable result of pre-retirement inequalities and discrimination that may need to be considered in recommendations for adjustments or reforms of Social Security and for the private pension system.
INTRODUCTION

The changes in wealth that occur from the middle years through retirement are associated with changes in the sources of income. We have already seen how working compensation drops from dominance as an income source in the early and mid-60’s, when most people retire, and is (partially) replaced by Social Security benefit payments and, mainly in the case of those with more than $60,000 of household income after retirement begins, by pension and capital (investment) income (refer to the ‘Income’ section of this Chapter).

But the replacement of working compensation by other sources of income mark another turning point in a worker’s life. That is the turn from saving for retirement to spending from retirement savings. To whatever extent savings is adequate to support a retirement that is fulfilling (sometimes approximated by a notion of ‘replacement rate’ or ‘ratio’, an expression of the percentage of post-retirement income to pre-retirement income that was explained in Chapter 1), savings are sufficient. But to whatever extent savings are inadequate, the retiree can do little but cut consumption to bring household expenses into balance with his household income. The difficulty of dealing with this inadequacy in one’s 60’s, or after retirement due to poorer health or difficulty in finding work, or simply due to one’s desire to spend the last several years in what may be leisurely but personally productive freedom, makes missing the chance for achieving retirement income security doubly devastating. The lack of adequate savings for retirement is
something that is at least difficult, and often impossible to redress in one’s seventies or eighties.

For our purposes here, wealth is of interest mainly because it represents the capacity for older individuals to continue to consume in spite of the diminishment and usually, the ultimate disappearance of compensation from employment sometime in their 60’s or early 70’s. The ability to consume sufficiently is a self-evidently basic good from the individual’s perspective and from the point of view of society’s interest in maintaining a fair level of health and material sufficiency for all its citizens, including its elderly. Sufficient wealth leads to sufficient retirement income, and so it is important to determine where we, as individuals and our society, currently stand in terms of wealth, and most especially wealth’s distribution amongst the elderly.

CHANGES IN WEALTH FROM THE MIDDLE YEARS TO OLD AGE

One definition of wealth is ‘net worth’, or total assets minus total liabilities. Total wealth, for purposes of the Survey of Consumer Finances, 2010 from which much of the data for this section on wealth was derived, consists of one's residence, vehicles, businesses, cash and money market accounts, and financial investments such as certificates of deposit, mutual funds, stocks, bonds, and other investments. It also includes a component called ‘nonfinancial assets’, which includes artwork, jewelry, and collectibles.
The Survey of Consumer Finances is an interview survey sponsored by the Federal Reserve System in coordination with the Department of Treasury. It is usually conducted every 3 years. The unit of analysis is the ‘family’, which generally refers to the “primary economic unit” equal to the “economically dominant” single person or couple, whether that couple is married or merely living together as a couple, plus everyone else in the household who are “financially interdependent” with that unit. (Bricker, Kennickell, Moore, & Sabelhaus, 2012, pp. 1, 76). Figure 9 shows net worth for families in 2010. Median wealth appears to stabilize around $200,000 in households of those in their 60’s while the means gradually go down as the household ages. The important point to note is that $200,000 is not a lot of wealth to have if one is facing decades of retirement, and about half of households have less than this amount when they start retirement.

Figure 9: Based on Survey of Consumer Finances, Excerpt from 2010 SCF Chartbook, Federal Reserve Board

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9 Bricker, Kennickell et al are a main reference for this section. Their summary was published as a Federal Reserve Bulletin in June, 2012 and focuses on the current data and historical data of the Survey. The other important reference used in this section was derived from the survey data and is referenced here as the Chartbook, published by the Federal Reserve. All historical data is inflation-adjusted to 2010 dollars.
Most crucial, however, to an understanding of the current state of the elderly and retired in terms of assets and wealth is to focus on the value of retirement accounts themselves in the years just before, and during, retirement. This is depicted in Figure 10.

Retirement account savings indicate the depth and resilience of one’s longer-term discipline and dedication to provide for one’s retirement. Retirement savings, after all, should represent multi-year commitments and sacrifices individuals make toward saving sufficient amounts for retirement.

But Figure 10 shows that half of people with any retirement account savings at all have retirement savings balances of about $100,000 at age 65. By age 75, with likely many years of retirement before them, those retirement account assets have been halved. Without secure income from a defined benefit retirement plan, the type of retirement plan that historically paid a fairly high percentage of pre-retirement compensation in
the form of monthly benefits to workers with decades of experience at a single employer, but which is a retirement program that is supported by fewer and fewer employers every year, the sources of income for those without significant savings are soon reduced to Social Security. Social Security was not designed to provide 100% of the retirement income needed in retirement, and in fact averages about 40 to 50%.

Indeed, according to the 2010 Consumer Finance Survey, the typical elderly household only had about a 50-50 chance of having any retirement savings at all, never mind one of sufficient size to be seen as a significant source of income over the decades of retirement that lie ahead of most new retirees. This is an important fact that we should keep in mind as we continue to try to comprehend the problems facing many workers in the United States, as they approach retirement age.

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10 From 1980 to 2008, participation of private firm workers in defined benefit (“DB”) plans was reduced by half, to 20%, and DB plans’ further decline is virtually assured by continuing plan terminations. (Butrica, Iams, Smith, & Toder, 2009, p. 1).
INTRODUCTION

While we have seen in the previous section the difficulties many have with saving significant retirement assets that can be used to fund retirement income, or otherwise having much in the way of liquidable assets that could be used to fund retirement, this next section’s perspective provides some insights on how wealth that can be used to fund retirement income is diffused throughout various subpopulations.

We will briefly look in this section at distributions of wealth across income, racial, and age-related categories. This could provide insights both toward the identification of particularly vulnerable subpopulations with low sources of wealth that could be converted into retirement income, and as possible inputs to a comprehensive evaluation of how national institutions could change to help to remedy any problems with retirement income insecurity, which is the main objective of the final chapter of this research.

This focus on subpopulations is not meant to obscure the fact that retirement income security is a problem that affects many across divergent demographic, racial, and age cohort lines. At the same time, some subpopulations can be identified as particularly vulnerable to retirement income insecurity. Again, just as a reminder, the means and
medians in any of the graphs and tables displayed in this section on wealth are based only on families that actually have the asset or account under discussion. Thus, they tend to overapproximate the means and medians of retirement account balances, net worth, or asset holdings of the entire population.

**RETIREMENT WEALTH BY INCOME CATEGORIES**

Based on data from the Consumer Finances Survey for 2010, the distribution of retirement accounts relative to income were very skewed toward the top. Only about 11% of the lowest 20% of families by income had a retirement savings account of any kind. This jumped to over 52% for those families with incomes in the middle quintile and over 90% for those in the top decile.

When we look at the distribution of participation in workplace retirement account in Figure 11, we see the same sort of distribution of the incidence of participation and nonparticipation that we saw when we examined income in the previous part of the chapter on income. Those in the lowest quintile of income participate at about a 45% rate. Those in the top quintile of income participate at an over 90% rate.

We should point out that the relationships between savings, retirement plan participation and retirement income are close. Workers who participate in a retirement plan are likely to save and as a result of that saving, are likely to have a significant source of income that they can draw down in retirement. But lower-income individuals are not
as likely to participate partly because they work in a company or industry that does not sponsor retirement plans, and this combined with lower savings rates that are related to lower incomes can combine to make it less likely for a relatively less well-off worker to achieve retirement income security than a higher-income worker.

In general, incidence and participation rates also vary across occupational lines, with management, professional and related occupations having a rate of access (meaning a retirement plan was available) that is double that of service organizations and a participation rate that is three times higher. Access and participation rates are also lower for those with part-time and nonunion jobs. (Bureau of Labor Statistics, 2012, pp. 2-3).
An important aspect of net investments and savings is the fact that, as wealth, they tend to diminish with age after retirement because they are needed for income. It is generally financial assets – including retirement savings accounts – that are needed to fund a comfortable retirement income because they can be easily liquidated and turned into income.

Figure 12 shows the distribution of different types of funds amongst various asset classes as people age. Note that only about half of the people entering retirement at age 65 have retirement account assets (retirement account incidence percentages are written above the ‘Retirement Accounts’ bar in the graph). The absence of savings instruments dedicated to funding retirement for such a large proportion of those entering retirement is not promising. The graph also indicates that without a pension plan account (or a promise of a defined benefit plan benefits payment, which is available to fewer and fewer retired workers because of the gradual decline of this type of plan, See Footnote 3), there are not a lot of assets to drawn down to produce retirement income, for many retirees.
Figure 12: Based on Survey of Consumer Finances, Excerpt from 2010 SCF ChartBook, Federal Reserve Board (‘Pooled’ refers to mutual funds and exchange-traded funds; ‘CV’ Life Ins’ refers to cash value life insurance contracts; ‘Other MA’ refers to managed investment accounts, trusts and personal annuities).
DEBT

Related to retiree wealth and its decline over time is the presence of debt, which reduces it. Figure 13 classifies various forms of debt for different age categories.

The data and the graph show that however much older workers and the retired stand out from other age groups for their high incidence of home ownership, over 40% in the age 65-74 age group and almost one-quarter of those in the age 75 and older age group are still paying off housing loans. (Incidence of housing loan debt is indicated as percentages written on top of the ‘Residence’ bars in Figure 14). Almost a third in the same age group held credit card debt. These debts represent claims on the liquidable assets of retirees as they age, and decrease disposable income available for consumption.
The median value of all debt payments to income for the 75 and older group (not shown) between 2001 and 2010 increased from 8% in 2001 to 14.1% in 2010, indicating a rising debt burden for this age group of about 50%, in an upward trend that was apparent well before the Great Recession. (Bricker, Kennickell, Moore, & Sabelhaus, 2012, pp. 55-72). This does not bode well for future net worth or financial asset balances, as these will be drawn down to pay off the debt in future years.

**RETIREMENT WEALTH BY RACE OR ETHNICITY**

Significant differences in the relative holdings of assets amongst different race or ethnicities are described in Figure 14, in which both the median and average holdings are shown.

Median assets for whites are more than 3 times larger than those of nonwhites and Hispanics. The difference between means is almost on the same scale.
Financial assets (savings and investments) were also held by far fewer Nonwhite or Hispanic families than White, Non-Hispanic families. The percentage of white families reported holding certificates of deposit was over twice that of Nonwhite or Hispanic families. The stock holdings of White, Non-Hispanic families was also over twice that of Nonwhite or Hispanic families. The incidence of retirement accounts was another significant difference in terms of the holding of financial assets between White, Non-Hispanic families and Nonwhite or Hispanic families, 58% vs 34%. (Bricker, Kennickell, Moore, & Sabelhaus, 2012, p. 29).

THE RELATIONSHIP BETWEEN WEALTH AND INCOME

The significance of these disparities in wealth between different income and demographic groups is that the source of income in retirement is significantly
dependent upon the ability to draw down savings. Wealth is mainly derived from income, and therefore grows with income across the distribution of income in one’s working years, but then income is derived from wealth in old age, and so is distributed in the same direction, with small amounts to people with little wealth and large amounts to people with great wealth. Wealth also grows at a faster rate than income, as first the ability, and then the propensity to save, increases on the margin, with income. Figure 15 clearly shows this graphically. Wealth is a curvilinear function of income, and at upper reaches of the income distribution, literally goes off the charts.  

![Mean and Median Value of Assets by Income Percentile](image)

**FIGURE 15:** BASED ON SURVEY OF CONSUMER FINANCES. EXCERPT FROM 2010 SCF CHARTBOOK, FEDERAL RESERVE BOARD

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11 Percentages of income (2010) correspond to the following: 20%: $20,400; 40%: $35,600; 60%: $57,800; 80%: $94,600; 90%: 142,300
This needs to be kept in mind as we evaluate the performance of the current private (workplace) pension system in the United States, because that system is very reliant on savings and retirement wealth. To the extent that wealth is not generated in working years, it is not available in retirement years, and without wealth, retirement income (at least beyond Social Security benefits) becomes a very difficult thing to generate. As we have seen in the last several illustrations, many workers are retiring without much wealth at all.

DIFFICULTIES IN SAVING AND INVESTING FOR WEALTH IN RETIREMENT AND LESSONS FROM THE GREAT RECESSION

SAVING ON A DOWNWARD TREND

The difficulties of saving during tough financial times is on view in the next presentation of the percentage of each age category engaging in any savings activity. Savings rates have gone down especially for middle aged workers in recent years, with those in the 45-64 year age categories hard hit in their prime savings years, though younger workers have also been significantly affected by the Great Recession. But Figure 16 indicates that all age groups have a reduced number of people that actually engage in savings activities, at least as self-reported, over the past decade, which indicates this is a longer-term trend that is not just a reaction to the more recent Great Recession.
A higher level of savings is of course important for more reasons than for retirement income adequacy. Household income volatility has increased in recent years, partly due to the difficulties remaining in employment, putting a premium on having a cushion of savings to get one through difficult times. In addition, though the main perspective throughout this Chapter has been on the individual and family, the level of savings of the nation as a whole is important to the level of investment, as there is a strong correlation between a nation’s savings and its investment rate. (Dynan, 2012, p. 3).

Finally, productivity increases from investments over the long term can make us more competitive and lead to greater employment opportunities. Since it is largely from our working compensation that the savings fund for our retirement income originates, anything that can strengthen the resiliency and financial rewards of employment strengthens retirement security. Employment opportunities, however, have fallen as a result of the Great Recession.

Even so, Figure 16 shows that the propensity to save has a falling trend. From the perspective of the absolute requirement to save to furnish sufficient retirement income beyond Social Security benefits, this may signal some concern. Retirement income depends upon a savings and investment balance which is sufficient to fund a retirement income stream that can support the maintenance of a living standard that could approximate the pre-retirement one, a key objective of retirement income institutions.
Between 2007 and 2010, the mean net worth of households fell down to the level of the 2001 CSF survey, and the median net worth was down to levels last seen in 1992. This was largely due to the fall in the value of housing and financial assets connected to the recent Great Recession. (Bricker, Kennickell, Moore, & Sabelhaus, 2012, p. 17). Those between the ages of 64 and 75 were particularly hard hit in terms of the average size of net worth losses, which was bound to affect their future retirement income, as net worth is a major source of it.

White non-Hispanic net worth fell from a median and mean of $179,400 and $727,400 to $130,600 and $654,500, while Nonwhite and Hispanic fell from a median and mean of $29,700 and $240,300 in 2007 to $20,400 and $175,900 in 2010, respectively. The
median decrease was therefore 27% for non-Hispanics and 31% for Nonwhites and Hispanics. (Bricker, Kennickell, Moore, & Sabelhaus, 2012, pp. 18-21).

Losses were not equally shared. The loss of net worth was concentrated in the lower part of the wealth distribution. Between 2007 and 2010, the median for the lowest quartile fell from $1300 to zero, that is, net worth was totally wiped out for the bottom 25% of families. This loss number was a still gargantuan one of 43% for the second quartile of net worth. The top decile totally escaped median losses on net worth, though the mean was down over 15%. (Bricker, Kennickell, Moore, & Sabelhaus, 2012, pp. 20,21).

Again, since wealth is a primary source of retirement income, the effect of the Great Recession was to put low- and middle- income families at additional risk for having insufficient savings and wealth to last through all the years of their retirement. But there is a lesson here that goes far beyond what can be taught through one, albeit severe, downturn.

That is that the investments that are the ‘lifeblood’ of our private, occupational defined contribution system are mainly uninsured investments, and that participants who invest in these funds through their retirement plans are completely at the mercy of the market. If the market takes a precipitous fall when one is either in retirement and living off those investments, or about to retire, many retirees have no choice but to make withdrawals from the reduced value of those assets in order to provide themselves with sufficient
income to survive. They may end up selling those assets at the very low point of the market, effectively locking in losses permanently, because there is little or no resources with which to replace those losses. Losses of assets through market valuation decreases can therefore permanently damage the income streams which those virtually irreplaceable assets produce. Younger people can recover those losses over future decades and by wiser investment management. Older people are often not in a position to recover much at all.

Though there are methods of diversification and partial guaranteeing of income streams that can reduce these risks of losses, many retirees are not financially astute enough to understand their investment risks and may not take measures to mitigate them, or to seek the advice of experts who can help to inform them of ways to reduce these risks. This ignorance is itself a detriment to retirement income security, and must stand as a reminder of the extent to which the success of our private pension system is dependent upon the financial acumen, foresight and curiosity of individual plan participants, and their ability to obtain frank and comprehensive advice. We only mention this here because it is related to the difficulties of saving and wealth-building, but will try to address this problem more specifically in the final chapter on reforms.

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CONCLUSIONS REGARDING WEALTH

It is now time to provide a summary of conclusions for this section of the chapter on Wealth. More general Chapter conclusions will be presented shortly.
1. Sources of wealth, like income, can be differentiated along the lines of incidence and amount. Both the incidence and amounts (measured here in terms of median and mean for several age categories) of different types of wealth (such as financial assets, nonfinancial assets, homes, cars, etc.) vary predictably with income and in the same direction. More specifically, wealth and income are positively correlated and incidence of assets is positively correlated with wealth and income.

What makes the elderly (starting in their 60’s, generally) so different from other age cohorts is that at retirement, they generally switch from a spending and savings mode to a spending only mode, which relies for its funding almost entirely on what they have saved and what they receive from Social Security. Except for higher-income people who receive significant pension income, the low and middle-class wage earners are dependent upon Social Security with a relatively modest retirement savings. For most income categories, savings and related financial instruments are gradually paid out and the individual’s wealth decreases in the course of retirement.

This simply means that those with little income or wealth in their working years have an uphill battle to avoid difficulties in generating sufficient income for their retirement. If they do not save adequately or are not covered well by their workplace retirement programs, they may have only a small amount of savings with which to start, and live through, their retirement.
2. Participation in retirement plans offered in the workplace varies by income and occupation. Participation rates are the result of the availability of a workplace retirement plan and the ability of the employee to save. Participation rates by highly paid and professional employees are much higher than participation rates for lower-paid employees, magnifying the inequality experienced in the income-producing years in the savings balances that will be available in the retirement income draw-down years. Lower-income workers in unskilled labor are particularly at risk for failing to amass much wealth for their retirement, but we have seen that this is also a problem for middle-income workers.

3. Median values of financial assets, which are generally the main source of retirement income, are extremely unimpressive for those between the age of 55 and 64, the years when most men retire, as we have seen in the figures accompanying the last section. This bodes ill for a cohort that could easily live up to two decades or more after the normal retirement age of 65 - 67.

4. The distribution of retirement accounts is extremely discouraging for the future retirement income prospects of the lower income percentiles, with only about half of families with household income in the lowest 3 quintiles even reporting they own retirement accounts.

5. Debt affects a high proportion of older citizens. A member of the 65-74 year old cohort has a 40% likelihood of owing money on the primary residence and a 32%
probability of owing money on a credit card. This represents a drain on present and future income.

6. There is significant variation of wealth and financial assets along the lines of race and ethnicity. Again, this is not to de-emphasize the larger problem of retirement income insecurity that may affect other subpopulations of the elderly retired, but it is worth noting that some groups are particularly at risk for having very little with which to support themselves in old age.

7. Savings rates have been going down, and the debt burden has been going up for the retired worker. This is particularly bad news for those 45 years old and older because they have only a limited number of years to save before their usual retirement ages, and many of them need to increase their savings rates. What seem to be cultural trends against serious savings behavior is itself an obstacle to generating significant retirement wealth.
Figure 17: Consumption Expenditures by Category as Percent of Household Expenditures Based on Data from the Consumer Expenditure Survey and Categories, 2010

<table>
<thead>
<tr>
<th>Age</th>
<th>55-64 yrs</th>
<th>65-74 yrs</th>
<th>75+ yrs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Food</td>
<td>11.9%</td>
<td>12.4%</td>
<td>12.3%</td>
</tr>
<tr>
<td>Alcoholic Beverages</td>
<td>0.8%</td>
<td>0.9%</td>
<td>0.6%</td>
</tr>
<tr>
<td>Housing</td>
<td>32.8%</td>
<td>34.8%</td>
<td>36.2%</td>
</tr>
<tr>
<td>Apparel and Services</td>
<td>3.1%</td>
<td>2.9%</td>
<td>2.2%</td>
</tr>
<tr>
<td>Transportation</td>
<td>15.9%</td>
<td>14.7%</td>
<td>13.6%</td>
</tr>
<tr>
<td>Health Care</td>
<td>7.6%</td>
<td>11.9%</td>
<td>15.1%</td>
</tr>
<tr>
<td>Entertainment</td>
<td>5.3%</td>
<td>5.6%</td>
<td>4.4%</td>
</tr>
<tr>
<td>Personal Care</td>
<td>1.2%</td>
<td>1.4%</td>
<td>1.4%</td>
</tr>
<tr>
<td>Reading</td>
<td>0.2%</td>
<td>0.4%</td>
<td>0.4%</td>
</tr>
<tr>
<td>Education</td>
<td>1.8%</td>
<td>0.6%</td>
<td>0.4%</td>
</tr>
<tr>
<td>Tobacco</td>
<td>0.9%</td>
<td>0.7%</td>
<td>0.5%</td>
</tr>
<tr>
<td>Misc</td>
<td>2.3%</td>
<td>1.8%</td>
<td>2.5%</td>
</tr>
<tr>
<td>Cash Contributions</td>
<td>3.7%</td>
<td>5.5%</td>
<td>7.2%</td>
</tr>
<tr>
<td>Insurance &amp; Pensions</td>
<td>12.6%</td>
<td>6.4%</td>
<td>3.2%</td>
</tr>
</tbody>
</table>

Average Annual Expenditures: $50,901, $41,436, $31,529
Income After Taxes: $66,611, $48,595, $31,638

INTRODUCTION

The changes in consumption and expenditure behavior that occur from middle age to late old age should tell us something about the peculiar spending habits of the middle-aged and older citizens, including what categories of consumption are the most significant and thus most impactful when pricing changes occur. A moderate increase in a slice of the expenditure pie that constitutes 10% or 20% of a person’s consumption budget is going to be more significant than a much larger increase in the average price of a slice that constitutes only a very small proportion of the pie, for example.

In turn, a view of the changing proportions of specific categories of consumption over time should help shed light on expenditure categories’ relative rise or loss of importance over time. Knowledge of these trends could be considered in policy recommendations,
for what the elderly spend their money on is just as important to understanding their material predicament as where they get their money from, which was the subject of the previous section of this Chapter.

For example, if food constitutes a smaller portion of an older person’s average expenditures than a younger person, then a food price hike is going to impact the older person less. If health costs constitute a relatively high proportion of the elderly’s total average consumption expenditure budget compared to younger persons, and health costs increase, the impact of those increases will severely impact an older person, while only producing milder problems for the younger person. This section of the chapter relies on the Consumer Expenditure Surveys for 2010.

**IDENTIFICATION OF EXPENDITURES OF PARTICULAR IMPORTANCE TO THE ELDERLY**

Let us look at changes in consumption-expenditure patterns that occur over the average lifetime. Just to be sure we are reading the chart correctly, let us offer an example. When we look over Figure 17 for the 2010 percentages, we can see that the relative significance of each major category of expenditure changes as one gets older. The relative proportion of food in the average consumption budget of a person who is between the ages of 55 and 64, for example, is almost 12% for 2010. It is a little higher, 12.4% for a person who is between the ages of 65 and 74, and goes a little lower for someone over the age of 75. Overall, however, the food budget, while significant in terms of being over 10% of total expenditures for the elderly, remains a critical part of their financial well-being.
consumption, does not change much as a percentage of total consumption between the ages of 55 and 75. Health care, however, is a different story.

Let us take a closer look at each of the most significant categories (constituting over 10% of total consumption), in order of importance. They include Housing, Health Care, Transportation, and Food.

**HOUSING**

To some extent, housing would seem to be less likely to be a burgeoning problem for an age group that tends to already own their homes, and in many cases, purchased them some time ago when prices were lower. But it is 30% and more of the consumption budget of the elderly (which for our purposes here include those who are at least age 55), according to Figure 17, and so it is a prime concern for all those who are moving into or who are already in retirement.

Approximately 80% of homeowners who were at least 75 in 2010 owned their homes, and 67% of those had no mortgage at all. More generally, those age 65 and older have ownership rates of over 80%, with about 60% of them with no mortgage at all. (Consumer Expenditure Survey, 2010).
But because of the largely fixed incomes that retired workers live on, it is almost as important for public policy to ‘hold the line’ on house maintenance expenses, for example, as it is to hold the line on medical care and medical insurance prices, which we take up next. As we will see with some of the other expenditures that impact the elderly, public policies affecting housing and rent generally don’t isolate their impact on the elderly as a separate, vulnerable group and thus may require either targeted policies (such as rent subsidies for the elderly) or a realized concern that, for example, taxes on housing wealth (which is usually under the jurisdiction of state and local authorities) may impact the elderly disproportionately because of their high incidence of home ownership and because of their fixed incomes.

Figure 17 shows housing expenses only mildly increasing as a proportion of total household expenditures as one ages, as average annual expenditures and income after taxes decreases. But the expense category is still responsible for over a third of the total consumption expenditures, and so any increase will seriously impact the amount of income that is available for other crucial spending purposes.

IDENTIFICATION OF MEDICAL EXPENSES’ RELATIVE IMPORTANCE TO OVERALL SPENDING IN RETIREMENT AND LATE OLD AGE

In terms of importance amongst total household expenditures, health care expenses are next in priority. Figure 17 shows that the significance of health care expenses grow quickly after age 64.
It should be pointed out that the expenditures recorded here are only for the ‘out-of-pocket’ expenses of medical care – those paid by the individual household. Insurance payments are not included, and medical benefits and equipment that are paid through government programs such as Medicare and Medicaid are also not included. Thus, health care’s share of gross domestic product and other national account measures is much greater than that reflected in the household expenditure accounts represented by the Consumer Expenditure Index. (Measuring Price Change for Medical Care in the CPI, 2010, p. 5).

Health care is divided into 4 categories – health insurance, medical services, drugs, and medical supplies, but in 2010 it was health insurance that constitutes the biggest item in the overall expenditure category, at 48% of total health care expenditures for all age groups and nearly 51% for those age 65 and older.

One of the most important characteristics of health care spending is that expenditures are extremely skewed toward the older and oldest groups, and within those, toward the upper-income groups. Health care expenditures as a portion of total expenditures is over 3 times higher for those age 75 and over compared to those age 35-44 (based on CES data).

In 2008, nearly one-third, or nearly $370 billion dollars of the total health care expenditures were spent on those age 65 and older. (Soni & Roemer, 2011, p. 1).
Individuals who were age 45 and older in 2008 represented almost 43% of those who were in the top decile of medical expenditures in both 2008 and 2009, demonstrating the high concentration of older people in the highest expenditure category as well as their persistence in remaining amongst the top spenders in medical care (43% of the same individuals who were among the very highest spenders in 2008 were also the highest spenders in 2009). That 43% can be used to express the disproportionate share of the elderly in this highest expense category by comparing it to the 13.2% of elderly that exists in the population as a whole, or more than a 3 to 1 ‘overrepresentation’. (Cohen & Yu, 2012, p. 2). The elderly ‘hog’ medical care, but also spend the main part of the subsidies provided by our society for it, as we will see in a moment.

Another component of the ‘concentration’ of medical expenditures in the elderly population is the commonality of the subset of health conditions that are most prevalent and costly to those age 65 and older. 34 million age 65 and over sufferers, or 86% of the elderly population, were treated for at least one of the ‘top 5’ highest-expenditure health conditions in 2008. The ‘top 5’ include hypertension (with 23.8 million elderly sufferers in 2008), osteoarthritis and non-traumatic joint disorders (with 13.4 million elderly sufferers in 2008), the treatment of heart conditions (with 12.7 million elderly sufferers in 2008), cancer (with 8 million elderly sufferers in 2008), and finally, trauma, with 5.5 million elderly sufferers in 2008.

The costs of health care are particularly hard on the ‘middle-aged’ elderly who no longer work but also do not qualify for Medicare because they are under the age of 65.
Medicare may stand as the primary bulwark of the elderly medical care system against impoverishment from health expenses, but like Social Security, it is not designed to provide a full benefit that would guarantee complete coverage for major health expenditures. Private insurance usually must be purchased to help to pay for gaps in Medicare coverage. Because of the ubiquity of major health expenses in old age, the lack of a social insurance program that guarantees coverage of medical expenses without exhausting the beneficiary’s assets should be seen as a major hole in the elderly welfare system – one that, like Social Security, seems to force one to look elsewhere than to existing social welfare institutions for answers to the problems of elderly financial insecurity.

Yet to a degree more difficult to fix for Medicare than Social Security, Medicare is straining to meet its current obligations to the growing number of its beneficiaries, elderly citizens of the United States. Necessary increases to its resources will likely prove to be a very heavy burden to younger taxpayers, as they shoulder more and more of the costs of supporting an increasing elderly population.

The scope of benefits has also changed. In 1959 the main scope of private insurance coverage was for hospitalization and surgical insurance. Nonhospital care, dental and other professional services are now apt to be covered under private health plans. Demand for these new services has gone up, partly due to the expansion of the availability of new technologies such as angioplasty, heart surgery, laser eye surgery,
and hip and other joint replacements, and this has inflated their prices. (McCully, 2011, pp. 16-17).

THE UBIQUITY OF COST INCREASES FOR MEDICAL CARE

Medical services, a component of the overall health care category that does not include insurance premiums, experiences price inflation that is not just a problem for the elderly, but it hits them particularly hard because of the greater size of the medical expenditure component of their total expenditure budgets. Figure 18 demonstrates that the rate of price increases for medical services are much higher than the general Consumer Price Index that is used to adjust prices for inflation for many government programs.

![Figure 18: Medical Care Inflation: Medical Cost Increases vs. Consumer Price Index, 1983 to 2010](image)

**FIGURE 18: MEDICAL CARE INFLATION: MEDICAL COST INCREASES VS. CONSUMER PRICE INDEX, 1983 TO 2010**
Yet this problem is in the end perhaps also a moral one. Technological advances in medical treatments have created an acceleration of the inflation in both the felt needs for, and capability of, expensive medical interventions, until they now represent not just a huge individual cost to the elderly, but arguably interfere with a fair distribution of benefits between the young and the old and amongst social priorities more generally. A dollar more of subsidy to an old man to fight heart disease who has a relatively short life expectancy with or without the disease has to measure up, ethically, to a dollar more invested in a young child that could help him or her to live both a more healthy and a more fulfilling life, and for a much longer time. Perhaps the time when such questions could be put off is over.

At any rate, the broader question of solving the just ordering of societal priorities in relation to elderly interests and claims with regard to health and medicine will need to be taken up, but with our avowed concentration on the Social Security system and the private pension system institutions, the more intractable problems of elderly health expenses will need to be faced mostly outside the perimeters of this paper. Nonetheless, those problems cannot be ignored in formulating a solution to any retirement income insufficiency problem that can claim to be complete.

TRANSPORTATION

Figure 17 indicates that transportation expenditures are a gradually diminishing function of age, falling after the beginning of the retirement years, but still a significant part of consumption – 13.6% - for those age 75 and over. It is therefore worth examining
whether there are trends in this category of expenditure that are particularly challenging to the elderly.

Vehicle purchases have risen modestly for those 75 years old and older in the past 30 years, and public transportation is a less significant part of total transportation expenditures than then. Perhaps older adults are driving more and need to replace their vehicles more often. Indeed, some studies have indicated that drivers between the age of 65 and 75 make more car trips than the rest of the population. Other studies indicate that the thought of no longer being able to drive is traumatizing to older citizens, especially to the suburbanite elderly. (Lord, Despres, & Ramadier, 2011, pp. 52-53). This should not be good news to anyone interested in improving either the environment or the financial health of elderly households, let alone the safety of our highways. The rate of fatal car crashes starts to increase at age 75 and goes up significantly after a driver turns age 80, though this is due more to the older drivers’ inability to deal with the medical complications associated with driving accidents than with an increasing tendency to get into accidents. Nonetheless, declines in vision and mental acuity affects the rate of traffic accidents for the elderly driver. (Centers for Disease Control and Prevention, 2009).

In the end, the objective of increasing the use of public transportation for the elderly for reasons of safety and efficiency will probably be part of a broader attention to better design principles for the communities and neighborhoods in which the elderly will live. In particular, recent research has indicated that older people prefer to live in households
with less space and maintenance requirements, easy access to public transportation, health facilities and shopping, and more opportunities for social interaction. Initial surveys seem to indicate a ‘village’ type community with a sense of community spirit and neighborhood support, with significant amounts of greenery, and with the availability of local, neighborhood trips is highly rated by elderly residents. (Burton, Mitchell, & Stride, 2011). Such communities would also answer to the need for economies of scale that were pointed out as advantages to married couples over singles in the previous section on income. How or whether this model could be adapted to either suburban or rural elderly living arrangements, however, is yet to be seen.

**FOOD AND BEVERAGES**

The food and nonalcoholic beverage category is the last we will cover in this section on elderly expenditures. This category has shown a real 20% decrease in average dollars spent as a percentage of total expenditures since the early 1980’s, based on Consumer Expenditure data. The consumption of food and beverages seems to be at a relatively benign level currently, but at the risk of dismissing the costs of nutrition out of hand, we turn our attention to what seem more pressing problems of elderly consumption and expenditures after briefly pondering a puzzle regarding the underutilization of food stamps by the elderly.

Estimates of the participation rates of the food stamp program (now called the Supplemental Nutrition Assistance Program, or ‘SNAP’) indicates that the share of eligible households actually receiving food stamp benefits is only around 60%.
However, the estimate of eligible individuals who are at least 65 years of age who participate in SNAP go down as low as 34%. (Nutrition Week, 2008, p. 2).

Needless to say, this additional source of consumption (or additional income, depending on how one looks at it) could significantly enhance the welfare of the poorer elderly by freeing up income to spend on other items important to their health and well-being. More research into the reasons that the elderly do not use the program could lead to higher take-up rates.

CONCLUSIONS REGARDING CONSUMPTION

Consumption uses income, which in retirement, tends to be withdrawn from savings balances that diminish and which are always in danger of being exhausted before the need for them ends. Income can be gobbled up by price increases in goods and services that have a high utility to the elderly, and this section has identified four categories of expenditures of particular significance to them: housing, health care, transportation and food.

While all of these categories are important, the biggest challenge is rising medical expenditures because these are an increasing strain not only on individual family budgets – including those of the elderly – but also because they strain the budget of the United States. There was a discussion of some of the ways that elderly expenditures
might be lowered, for example through the use of communal living arrangements and by emphasizing public transportation over the use of cars, which coincidentally would reduce the rate of accidents and medical costs related to them.

Finally, we examined how food expenditures might be kept down for the poorest elderly by promoting the use of food stamps, which are vastly underutilized by them. Tax policies that penalized consumption (state sales taxes, for example) could also be evaluated as a challenge to the elderly expenditure budget, but there is plenty we already do, and more we could do, if we wished to provide more significant tax relief to the elderly through changes in the federal tax law. However, this is beyond the scope of this paper.

This brief examination of expenditures is best seen as a perspective on the ways in which income can be challenged by consumption, for if prices rise relative to the often fixed incomes of the elderly, their real standard of living may suffer. For just this reason, Social Security payments are adjusted for inflation, and in-kind benefits such as the food stamp program are increased periodically. In spite of these adjustments, the rate of price increase on the basket of goods the elderly tend to purchase is higher and more rapid than the general price levels, as suggested in the illustration for medical services.

For this reason, a new CPI adjustment may warrant serious consideration for elderly benefit payment adjustments, such as for Social Security benefits.
This chapter covered income, wealth and consumption and the ways in which they interact to furnish the elderly with the possibility of maintaining their standard of living into retirement, but far less than a guarantee. There were several key conclusions relating to a comprehensive understanding of the material predicament of retirees that will be helpful in our eventual evaluation of possible reforms to the United States’ primary systems of retirement income support; namely, the Social Security system and the private occupational pension, or ‘workplace’ pension system.

Our study of income sources, for example, showed the absolute priority of Social Security as the primary and often sole source of income for those with incomes below $40,000. We also saw that Social Security offered higher rates of replacement income for those in the lower income ranges, while those in the higher income categories still obtained significant help from it in support of their standard of living. Yet Social Security has never been tasked to pull the whole load of the material needs in retirement, and so those entering retirement need other sources of income to ensure a standard of living that is not significantly reduced from their working years.

We also saw that only certain individuals have significant income sources other than Social Security income in retirement. Those who do tend to be former employees who were fortunate enough to be covered by workplace retirement plans and have managed to raise significant amounts of wealth that can be liquidated over their retirement years.
These former employees were generally employees who earned average and above-average incomes.

We saw how those who earned relatively less during their working years had lower levels of retirement wealth that they could draw on in retirement, and therefore have lower incomes in retirement. About half of people with any retirement savings at all have only about $100,000 saved up at age 65, which assets are at only about 50% of that 10 years later. But only about half have any retirement savings at all. In sum, we saw how high income and good pension coverage is related to high retirement wealth and relatively high income replacement rates, and low income and lower pension coverage under workplace retirement plans is related to a paucity in assets of the type that could be drawn down during retirement, which lead to low income replacement rates.

We also briefly reviewed the importance of working compensation as a source of retirement income and savings, and learned of some of the difficulties older workers face in a lay-off. Finally, we saw that certain expenditures such as for medical costs are particularly difficult for the elderly to absorb because their prices and quantities represent a gradually increasing portion of the retiree’s consumption basket and squeeze out discretionary income from non-wealthy retirees’ generally fixed incomes.

Before stating our conclusions concerning our examination of income, wealth and consumption from the point of view of making a preliminary assessment of our main
institutions of Social Security and private firm retirement savings and investment programs, we would like to briefly summarize some models of income sufficiency that tend to support our conclusions that many retirees are facing the prospect of a fall-off in their standards of living in retirement due to insufficient wealth and income. The choice of these models to review is based on the high respect their author-researchers have earned in the field of retirement income research, and the prominence of their institutions among those known for such research.

A REVIEW OF THREE RETIREMENT INCOME SECURITY MODELS AND STANDARDS

INTRODUCTION

These models are all based, one way or the other, on income replacement ratios, which concept was introduced in the first chapter. Briefly, the post-retirement income replacement rate or ratio is a ratio of post-retirement income to pre-retirement income. The closer to 100% it is, the less of a probability that one’s consumption in retirement will need to be significantly decreased over the level of consumption one enjoyed during the working years, when compensation usually contributed significantly to income. This measurement gets to the ‘heart’ of the elderly income sufficiency problem because it recognizes that retirement income security is really about having some protections against having to suffer a significant fall in one’s standard of living in retirement.
Both a description of their methods and recent results of their models that are relevant to retirement income adequacy, which is defined individually for each system, are briefly evaluated in this section.

THE NATIONAL RETIREMENT RISK INDEX

(Designed by Alicia Munnell and the Center for Retirement Research at Boston College).

The National Retirement Risk Index ("NRRI") projects income at age 65 for a sample of several thousand households based on the Survey of Consumer Finances ("SCF") data on wealth and income. The measurement is of working-age households that are at risk of experiencing a significant diminishment of income in retirement. Income includes investment income and government transfers, including Social Security, and of course earnings from employment and self-employment.

Financial assets projected for retirement (presumed to be at age 65) are based on wealth-to-income patterns from several consecutive waves of the SCF surveys. Average annual income from those assets is based on a real rate of return of 4.6%. Social Security benefits are calculated based on the earnings histories for household members. These earnings histories are indexed, inflation-adjusted and averaged over the life of the household. Housing ‘income’ is based on the rental value that homeowners receive by living in their own homes (rent free) and the income they could receive through a reverse mortgage.
Essentially, the method that was used to determine the wealth at age 65 was to apply the wealth-to-income ratios of 8 SCF surveys, which (according to Munnell) show a consistent relationship between median wealth-to-income ratios. The median ratio of wealth to income is approximately 1 at age 35 and 4 by the early 60’s. Estimated balances in retirement plans, other financial assets (net of mortgage debt), and housing equity are projected based on wealth-to-income ratios in the SCF. More specifically, the wealth-to-income ratio of each household from 8 SCF surveys was set as the dependent variable and the age and birth cohort as the independent variable, in order to develop an equation for the estimate. Three separate estimates were created, one for each income tercile.

Defined benefit wealth and income, however, was not projected in this manner. Instead, pension payments in retirement were imputed from SCF data. Social security benefits were estimated from the earnings history of household members. Pre-retirement income was estimated from the administrative Social Security records that can be linked to the Health and Retirement Study (these are restricted files). The income from wealth after retirement is based on the assumption that an inflation-adjusted annuity is purchased. For couples, the annuity is assumed to be a 66 2/3% survivor annuity (2/3 of the payment made to the individual while living goes to the spouse after death). Earnings prior to age 65 are divided by projected earnings after age 65 to determine the replacement ratio.
Munnell developed “replacement rate targets” by income group and household type. For all “Household types”, a 73% replacement rate was the target rate, on average. However, that rate varied across the terciles of the income distribution, with the top third having target replacement rates in the high 60’s percent and the bottom third in the low 80’s or high 70’s percent. In addition, target replacement rates varied with the type of household. For example, a two-earner couple had a target replacement rate of 72%, while a one-earner couple’s replacement rate was 76%. A single man’s target replacement rate is 70% and a single women’s, 73%.

Each household’s projected replacement rate is then compared to its targeted replacement rate to determine the National Risk Index. If the projected household replacement rate is more than 10% below the target, that household is determined to be at risk of not having sufficient income to maintain its pre-retirement lifestyle. For example, using the target replacement rate of a single male, 70%, if the projected replacement rate were less than 63% for the household, that household would be ‘at risk’ of not being able to maintain its pre-retirement standard of living, according to the National Retirement Risk Index.

The model was run to take into account the SCI data for 2010, which included impacts of the Great Recession. Under the metric used by the NRRI, households whose projected retirement replacement rates fall more than 10% below the target replacement rates are at risk “of having insufficient income to maintain their pre-retirement standard of living.” The percent of households based on this criterion were as indicated in the
illustration of Figure 19, for both 2007 (which was based on 2006 SCI data) and 2010, showing a significant deterioration. Alicia Munnell et al ascribed this deterioration to a decline in stock values, the lengthening of time before the attainment of the full retirement age under Social Security, a decline in housing values, and an environment of low interest rates.12 (Munnell, Webb, & Golub-Sass, 2012, pp. 3-5). See Figure 19.

More specifically, under the more recent projection of the model, there was an increasing population of younger oldsters whose full retirement age under Social Security is age 66 or 67. Because the assumed retirement age under the NRRI model is age 65, replacement rates were negatively affected by the absence of Social Security income in the first years of retirement, a dominant (and very nearly the only, for some) source of income for the low-income households’ replacement rates.

<table>
<thead>
<tr>
<th>Percentages of Households At Risk at Age 65</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age Group</td>
</tr>
<tr>
<td>All</td>
</tr>
<tr>
<td>30-39</td>
</tr>
<tr>
<td>40-49</td>
</tr>
<tr>
<td>50-59</td>
</tr>
</tbody>
</table>

FIGURE 19: MUNNELL, WEBB & GOLUB-SASS’S REPLACEMENT RATE MODEL, 2007 AND 2010 RESULTS

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12 Two of which features have recovered significantly from their low points in the past Great Recession, as well as from those current for the 2010 Survey of Consumer Finances, and one of which (interest rates) is expected to move higher over the next few years.
In addition, there were several changes in the general economy that damaged asset values between 2007 and 2010. The Wilshire 5000 Index was down by 24% at the time of the 2010 Survey of Consumer Finances from its peak in October 2007. And housing values dropped by about the same percentage. The assumed annuitization of assets was affected by lower interest rates at the end of this period, which decrease the size of prospective asset income flows. This tended to decrease the amount of post-retirement income available from annuitizing assets (Munnell, Webb, & Golub-Sass, 2012, pp. 4, 5).

PATRICK J. PURCELL’S INCOME REPLACEMENT RATIOS

(Patrick Purcell works in the Division of Policy Evaluation, Office of Research, Evaluation and Statistics, Office of Retirement and Disability Policy, Social Security Administration).

Income replacement ratios was the focus of Purcell’s careful study using the Health and Retirement Survey (HRS), 9th wave (which was fielded in 2008) as well as previous HRS surveys and other data.

Purcell used four alternative measures of retirement income in his calculation of replacement ratios: household income, shared household income, shared household income plus the potential income of using 80% of financial assets (not including housing) to purchase an annuity (which would pay monthly income), and shared
household income plus the potential income from using 80% of all financial assets to purchase an annuity (including home equity). We will concentrate on the last two since these include the value of liquidated assets (wealth).

For preretirement income (the denominator of the retirement income replacement ratio), Purcell uses the average of the annual income earned in the 3 previous waves of the HRS survey before retirement. Since the HRS survey is repeated every two years, this approximates annual income in the 6 years prior to retirement, and this method ‘smooths out’ the income so that any temporary rise or fall in income will not impact the ratio very much. Income was also adjusted for inflation using the CPI-U (the Consumer Price Index for all Urban Consumers). Finally, the income was determined on a pre-tax basis as data were not likely to be available to use an after-tax basis. Workers were classified as retired if they were both not working full-time and indicated they considered themselves partly or fully retired.

The definition for retirement income (the numerator of the retirement income replacement ratio) that is used in the analysis is total household income, for each year in which the participant was retired in the years in which the HRS was administered. The income is averaged and inflation-indexed just as in the case of preretirement income.

In what would seem be realistic approximations, Figures 20 and 21 are excerpts that show two of Patrick’s definitions of income in retirement. The first (Figure 20) includes
income that would be produced by annuitizing 80% of the financial assets (not including housing) of the household. The second one (Figure 21) includes income from the annuitization of all financial assets, including housing (this is sort of a ‘worst case’ scenario, since most elderly do not want to annuitize their homes):

In Figure 20, the median level of replacement ratios are close to averaging 80%, and the highest income quartile is positively brimming over with income. However, the lowest quartile is suffering from a fairly precipitous drop in income after they retire, as they are below the 80% replacement rate target. The median is also below the 80% target income replacement ratio.

In Figure 21, 80% of all assets (including the house) are annuitized, and this brings the median well within the 80% range of replacement rates. The lowest quartile is significantly better off annuitizing their homes, but they do not increase their replacement ratios as much as the higher level percentiles because more of them do not own their homes and the ones that do have homes of lesser value, on average. Those in
the highest quartile are exuberantly lush with income under this scenario, but the bottom quartile is still significantly below the 80% target. Generally, too, people do not sell their homes or use reverse mortgages to any significant extent to fund their retirement income needs, so the replacement rates on that account may be unrealistically inflated.

FIGURE 21: EXCERPT FROM TABLE 1, (PURCELL, INCOME REPLACEMENT RATIOS IN THE HEALTH AND RETIREMENT STUDY, 2012, P. 44),

<table>
<thead>
<tr>
<th>Percentile</th>
<th>First or Second Year</th>
<th>Fifth or Sixth Year</th>
<th>Ninth or Tenth Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>75th</td>
<td>141%</td>
<td>126%</td>
<td>121%</td>
</tr>
<tr>
<td>Median</td>
<td>100%</td>
<td>87%</td>
<td>83%</td>
</tr>
<tr>
<td>25th</td>
<td>68%</td>
<td>62%</td>
<td>61%</td>
</tr>
</tbody>
</table>

Finally, perhaps a weak point of the analysis is the use of pre-tax income. Purcell recognizes that it is after-tax income that is available for consumption, which is closer to the concept that users of a replacement ratio are generally trying to deal with – the capacity of post-retirement income to purchase some percentage of pre-retirement consumption. But noting that the data is not readily available, he does point to other studies that indicate that because post-retirement income is generally taxed at a lower rate (due to the fact there is both less of it and some of it such as Social Security benefits are taxed at lower effective rates), using pre-tax income will tend to underestimate the
replacement rates obtainable using after-tax income. In a further defense of his choice to use pre-tax income, however, we could add the fact that trying to determine after tax income in both the pre-retirement years and the post-retirement years would be a daunting task, because each household’s tax situation is so individuated. The only practical way to improve the accuracy of the replacement ratios on that count would be to bring in the actual tax records of the respondents.

Purcell offered several other insights based on his evaluation of the model that are worth stating to obtain a well-rounded view of his longitudinal calculation of the income replacement ratio:

1. Replacement ratios tend to fall during the first 7 or 8 years of retirement possibly because nonrepetitive receipts of income such as lump sums are more likely to be paid in the first part of retirement, and also because new retirees are apt to work on a part-time basis until they are completely retired.

2. The research confirmed the predominance of Social Security income at the median and in the lower quartiles of the preretirement income categories, due to its progressive formula (this was discussed earlier in this Chapter).

3. Those who retired before age 62 were less likely to have replacement ratios above the median. This was due to the permanent loss of a portion of the monthly Social

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13 Smith estimated that after-tax replacement ratios would be approximately 20% higher for a median earner, in his replacement ratio analysis. (Smith, 2003, p. 766)
Security benefit when it is taken before the full retirement age. (Purcell, Income Replacement Ratios in the Health and Retirement Study, 2012, pp. 44-49).

**RETIREMENT SECURITY PROJECTION MODEL (RSPM)**

(Designed by Jack VanDerhei, Director of Research for the Employee Benefit Research Institute (EBRI) and later developed further with several other researchers).

This last model is a multifactor simulation of the interaction of probabilistic events that attempts to predict the relative level of ‘retirement security’ for an individual family and is a true model in that it is designed to allow for an altering of investment rates of return assumptions, life expectancies, employer contribution or employee contribution rates, as well as economic events in order to approximate their likely cumulative effect on retirement income security.

The data used for the model includes administrative records of millions of 401(k) participants dating back to the mid-1990’s, Social Security income projections, defined benefit annuities, distributions from retirement plans and IRAs, housing equity at retirement, etc. These inputs are then “run through 1,000 alternative retirement paths to see what percentage of the time the households “run short of money” in retirement.”

“The present value of the deficits generated in retirement are also computed, and divided by the accumulated remaining wages of the household to provide a percentage of compensation that would need to be saved in each year (in addition to any employee
contributions simulated to be made to defined contribution plans and/or IRAs) to provide a 50, 70, or 90 percent probability of adequate retirement income.” (VanDerhei, A Post-Crisis Assessment of Retirement Income Adequacy for Baby Boomers and Gen Xers, 2011, p. 4),

The model thus can not only predict shortfalls with a variety of confidence intervals, but also calculate what would be required in terms of saving to obtain a desired level of income adequacy within a desired probability of success. More than the other models we are closely examining in this section, this model is designed from the start to tell us what needs to be done in terms of increasing savings in order to improve the outcome.

The level of income aimed at in this model, in the first instance (the ‘basic’ model), is one that can meet expenses determined from the Consumer Expenditure Survey as a function of income. Thus, it directly acknowledges that the purpose of an income and wealth model is to provide statistics on the probability of the success or failure of paying projected expenditures in retirement.

These expenses are both deterministic (some of which are functions of income) and stochastic (derived from probabilistic distributions). The model can be configured to provide statistics on whatever retirement income level is considered adequate, or to compute income replacement rates, or can be adjusted for other types of income objectives.
The retirement income adequacy determined in 2012 using this basic model looked at ‘Early Baby Boomers’ (those born between 1948 and 1954), ‘Late Baby Boomers’ (those born between 1955 and 1964) and ‘Generation Xers’ (those born between 1965 and 1974) and found that the following groups were ‘at risk’ for inadequate retirement income. Please see Figure 22.

According to the model, as of mid-2012, retirement readiness could not be said to be on display for the great bulk of workers in the lowest two income quartiles. Nearly 87% of
Early Boomers, 84% of Late Boomers, and 78% of Gen Xers in the lowest income quartile were at risk of running out of money sometime during their retirement. Somewhat less than 50% of each of those cohorts were at risk in the second quartile of income. In any case, those in the bottom half of the post-retirement income replacement ratio percentiles were considered as having an extremely high chance of failing to meet the retirement income targets set for them under this model.

VanDerhei offered several insights into the conclusions of recent projections from this model:

- The shortfalls in savings at age 65 needed to preserve income adequacy post-retirement are up to $42,000 for single males and over $70,000 for single females on average, with Early and Late Boomers generally doing much better than Late Boomers.

- Eligibility for participation in a defined contribution plan significantly reduces the savings shortfalls. The more years of future eligibility for participation in these plans, the less savings shortfall is predicted by the model. Eligibility for work-based savings plans is a predictor of savings levels.

- Shortfalls in savings varied negatively with the income quartile and with years of future eligibility (VanDerhei, Retirement Income Adequacy for Boomers and Gen Xers: Evidence from the 2012 EBRI Retirement Security Projection Model, 2012, pp. 3-8).
As VanDerhei leans toward providing ‘advice’ centered on individual actions with his model perhaps more than the others, his model displays, perhaps more than the others, the real value of models. Increased savings are needed, the model shows, and access to retirement plans is a big step toward that objective. The sad thing the model points out is that the savings amounts needed do not seem to be overly large, at least from the point of view of a 20-year old worker looking out 45 years or more toward retirement. What might be tragic is that so many Americans may not achieve retirement income security, no matter how ‘little’ things might have to change in order to attain it.

WHAT THE INCOME REPLACEMENT MODELS TELL US

From the point of view of our study of wealth and income, we really have to be somewhat concerned that all three models are telling us more or less the same thing concerning replacement rates or their generic equivalents within the broader category of post-retirement income inadequacy.

First, the models are telling us that replacement rates/ post-retirement income sufficiency are a positive function of income and savings (wealth), and wealth (as we have explored wealth in an earlier section of this chapter) produces little income for the bottom half of the population because they have so little. All of which is to say, that those in the lower income categories are doing fairly poorly under the current retirement income security system if the criterion is the maintenance of a pre-retirement standard of living. Under all 3 models, those who are in the bottom half of
the income distribution are likely to have the highest probability of failing to maintain their standard of living into retirement. However, those occupying a middle rung in the income ladder have a considerable opportunity to lose their standard of living when they retire if they do not have a significant level of assets from which to draw retirement income.

Second, no matter how secure and safe Social Security benefits payments are, there is insufficient additional income that can be created from the liquidation of the total asset values of financial investments and homes to fund a retirement adequately, for many people. This is important because selling their home is often the last thing that a retiree wants to do, except if he or she is forced to do it for the sake of needed income. Yet in many cases this still will not be enough to boost an income replacement rate to 80% or above.

The main point for now is to note that the current state of retirees is not benign, for a large proportion of them score low in terms of their preparation for funding retirement income. Significant percentages are predicted to not have sufficient financial assets to replace a high level of income in retirement and so, for many, a precipitous fall in their standard of living at some point in their retirement seems inevitable. They simply do not have enough retirement wealth.
WHAT IT ALL MEANS TO NATIONAL RETIREMENT INCOME SECURITY

There are a variety of conclusions we can draw from this examination of the present financial state of United States’ elderly workers and retirees that can inform national policy.

The bottom line conclusion is that if Social Security is generally not enough to fund the total income required to live close to the standard of living one had during one’s working years, and if it is not going to be re-designed to do more than it does currently, then the other components of retirement income support are not doing their job. The traditional 3-legged stool of retirement income which encompassed Social Security, the employer and the employee (or individual) has two failing legs, at least for a lot of people.

Inadequate retirement savings is certainly one of the culprits, and workplace retirement plans are an important means for helping employees to save and invest in their retirement. Workplace retirement plans are virtually the only place that employers provide retirement funds to employees outside of Social Security payroll taxes, and even where employers don’t actually provide any contributions, employees do much better saving for retirement when they are contributing to a workplace retirement plan, which can only be done if their employer offers them one. Increasing coverage in workplace retirement plans is certainly a means to improve retirement savings. But savings
behavior would need to change as well if significant retirement balances are the objective.  

The lack of much in the way of financial assets in general, especially but by no means exclusively at the lower end of the income spectrum, is another factor holding back the increase of wealth that could be used to fund retirement. Wealth produces income that begets wealth. This is another savings problem, but a somewhat different piece of that puzzle that will also need to be solved, at least partly, by changing the behavior of individuals.

But there seems to be some drawbacks, at least in some cases, to relying on changing behavior to solve the retirement income security problem. For one thing, some workers will have difficulty saving for what many reasonable people will tend to think are good reasons. Low-income families may be struggling to get by and might have to take food off the table in order to save much beyond a safety cushion, for example, or to save for college for their kids or to pay medical bills for an elderly relative. In addition, there seems to be a cultural shift that would need to be overcome in terms of increasing the propensity to save, for as we have seen in data in this chapter, it has been declining. And the personal savings rate is projected to continue to decline, to 2.7% by the year 2020.

14 There have been some significant improvements in savings levels connected to automatic enrollment programs that we will examine in detail in the final chapter on reforms. Based on the 2010 Survey of Consumer Finances, about 40% of plans are using it in some form or another. There may also be problems with relying too much on it.
(Ghilarducci, 2014, p. 13). Changing behavior can be very difficult in and of itself, too. Some people don’t want to change. Some can’t.

We don’t need to stop there with a fixation on the private pension system, either, if we are interested in examining the fullest set of possible solutions to the retirement income insecurity problem laid out in this chapter. Perhaps Social Security itself should be upgraded to provide more than a basic benefit or perhaps it should be reformulated to be (partially) funded differently (e.g., pre-funded, or through the use of general tax revenues, national sales tax, or other means). If it has been such a strong leg of an otherwise wobbly stool, why not get a little more out of it?

For now, we can only say with absolute certainty that enough evidence exists to state that there is a significant retirement income security problem in the United States that needs to be solved.

Before any discussion of possible reforms or other amelioration of the present and future difficulties that retirees are likely to suffer due to inadequate income funding sources and retirement savings balances, however, it might be worthwhile to ponder the experience of other nations which face similar problems, and to consider whether we could adapt some of their better-performing institutions to alleviate some of the inadequacies in retirement income sourcing that we have described for the United States.
This is the subject of the third chapter, which will bring us into the proper international perspective for a more fulsome evaluation of reforms, in the last.
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CHAPTER 3: COMPARATIVE ANALYSIS OF
REPRESENTATIVE NATIONAL PENSION SYSTEMS

INTRODUCTION

An important objective of this research is to identify the ways that different national retirement income systems provide successful solutions to the retirement income security challenges delineated in the previous chapter, which were described mainly from the perspective of the United States. The ultimate goal of this chapter is to provide some international background, including examples and historical policy trends that will be useful to drawing up recommendations for the adjustment, or if needed, reform of the United States’ approach to the retirement income security problem.

We need to focus on retirement income policies and institutions in a way that ensures our observations are neither too narrow nor too broad, if we are to come up with comparisons that lead to focused conclusions and recommendations. The OECD (Organization for Economic Co-Operation and Development) nations have been chosen as the proper population subset for comparisons with the United States on social welfare programs and retiree income benefits in particular, as these particular nations have historically represented broadly similar market-based economies and predominantly democratic institutions, and because they include many economically developed countries that, like the United States, represent a fair and open society, at least ideally. (OECD, 2013).
At the same time, there are important differences among the OECD nations in the choices they have made and the historical trend lines they exhibit which relate to peculiarly national tendencies in the way they solve the old age security problems of their societies.

However, before describing a means of ‘typecasting’, to some extent, the historical trends in the development of retirement security systems across the OECD and comparing national retirement income security systems, it is important to acknowledge what seem to be the best contenders for the most important questions concerning their retirement systems:

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**WHO GETS HOW MUCH?**

The level of retirement income is most likely to be among the most important characteristics of retirement income security systems. We will look at this closely, internationally, as we have for the United States in the previous chapter. It is the ‘proof of the pudding’ of a retirement income security system.

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**HOW IS IT PAID FOR?**

The second major perspective is the ‘supply side’ perspective. How are the benefits really paid for? Who pays for them? What part of the electorate, the beneficiaries, the public and private sectors come up with the resources? Mandates on employees,
employers, and governmental support come in many different varieties, and there are differing levels in the mix of mandated and voluntary activities across the OECD. Government involvement is heavier or lighter, depending upon the long-run (cultural) or immediate, political ideologies currently being exhibited in legislatures and the private sector.

Finally, let us profess at the outset some necessary parameters for this international excursion. While we acknowledge the desirability of presenting a thorough understanding of the welfare states’ history, culture, and national institutions whose retirement income systems will be compared in this section, by the nature of the dissertation’s objective to improve the United States retirement income system, and acknowledgement of the United States’ distinct and unusual history, the cultural and political history of other nations will need to be brief and pointed. We will also need to concentrate on a smaller subset of nations than the entire set of OECD countries, if we are to cope with the sheer quantity of information while still capturing a basic comprehension of the overall design, internal integration and effectiveness of each national system we study. The following section will explain our reasons for choosing the countries we have.
We will make use of Esping-Andersen’s familiar typology of welfare states in this Chapter, mainly as an heuristic device to help to explain differences in the trajectories of the historical and most likely tendencies for future development of national pension systems, acknowledging that the typology’s main strength is its offer of an analytic perspective rather than its power to predict the future. We do not go into any detail on differences other welfare state typologists may have with this particular categorization, nor with the evolution of thinking on these typologies that have tended to add more and more categories and express more and more exceptions. Esping-Andersen’s typologies are seminal and are well enough developed and detailed for the use we will put them to in this Chapter.

Let us begin with a brief review of welfare state typology. Under Esping-Andersen’s classification, there are Liberal, Corporatist, and Social Democratic states. (Esping-Andersen, 1990, pp. 9-33).

**Liberal** welfare states tend toward means-tested assistance programs, with other public benefits generally modest. The private market is dominant and generally unobstructed by governmental regulation. Examples of this model are the United States, Great Britain, Australia, and Canada.
**Corporatist** welfare states are much less dominated by a faith in the market. Social assistance and benefits programs are more liberal than in the liberal welfare regimes. At the same time, since these corporatist regimes are often associated with the Church and ‘family values’, certain types of social insurance, such as day care, may not be well developed. In addition, workers who perform in nontraditional industries or as part-time workers may not be as protected by regulation and labor policies as employees of the largest and most dominant employers. Examples of this model are Austria, France, Germany and Italy.

Finally, the **Social Democratic** welfare states pursue a strategy of “promoting an equality of the highest standards, not an equality of minimal needs as pursued elsewhere”. In these welfare regimes, redistribution is highest and class differences are lessened. Children, the aged, and the helpless are taken care of by governmental programs. There is usually a commitment to high employment and generous benefits and social protections. Sweden, Norway, Denmark and Finland are examples of this kind of regime. (Esping-Andersen, 1990, pp. 26-29).

Our choice of countries to compare was partly derived from Esping-Andersen’s argument that the differences between welfare regimes were the result of historical developments and deep cultural traditions that impacted their national societies’ choices in the design and development of their institutions, including old age support schemes. We first chose countries that represented each type of welfare state, and then added Japan both because it has the oldest population of any OECD country, and because it
provides another example of the same welfare state type as the United States, which, of course, remains our primary focus.

Under Esping-Andersen’s categorization, France is a ‘conservative’ or ‘corporatist’ regime, Japan and the United States are examples of ‘liberal’ regimes, and Sweden is a ‘Democratic Socialist’ regime. These are the primary countries which will be used for comparisons of retirement income security systems in our brief analysis, with the hope that we will be able to ‘slice’ the differences between the ways each country copes with the same problem along the lines of the welfare state typographical categorizations that each country represents.

\footnote{For reasons that will become clearer, Esping-Andersen’s categorization of Japan as a ‘corporatist’ regime seemed out-of-date as its lifelong corporate employment tradition has declined and its social welfare systems seem sized more toward basic poverty reduction rather than a maintenance of a high standard of living for those who work in the primary industrial sectors of the economy. For purposes of this analysis, it will be considered a liberal regime.}
THE OBJECTIVES OF A NATIONAL RETIREMENT INCOME SECURITY SYSTEM

INTRODUCTION

The principal performance criteria for a national retirement income security system would seem to be the extent to which the national pension system, by which we mean the combination of its closest equivalent to Social Security (generally the government institutional or, what is sometimes referred to as the public contribution to old age security), and its occupational or ‘private’ pension system (usually focused on participants as workers) achieves a set of benefits objectives and funding objectives, as explained at the beginning of this chapter.

A national pension system would therefore be expected to encompass the following categories of objectives, which are primary and are stated in rough order of priority:

I. BENEFITS OBJECTIVES

1. Provide a level of benefits that meets a decent level income standard. We can call these ‘basic benefits’ objectives or ‘poverty reduction’ objectives. These basic benefits may either be means-tested or be provided in a pre-set or formulaic amount. They may also be provided almost as a right to workers who have met other eligibility requirements, such as a requirement for a set number of ‘years of service’
for those who have reached a certain age (normal or full retirement age under Social Security).

2. Provide a level of post-retirement income (or more exactly, a level of consumption) that is close to the level one had during one’s working years. We can call this an ‘income replacement’ objective or pre-retirement income replacement objective.

3. **Progressivity/Regressivity**, the degree to which the benefits level takes into account differences in working compensation (or income more generally) such that those in the lower part of the compensation/income spectrum may receive a benefit that is either the same as, or relatively more than, a benefit paid to those in the higher part of the compensation/income spectrum, when expressed as a fraction of working compensation or income, is another benefit design concern.

   This objective, however, is closely tied to funding, which has its own set of objectives to be discussed in a moment, and there is room to refine the objective with reference to the sources of funding.

   For example, ‘State-funded’ retirement income security objectives are expected to be more alert to fighting, or balancing, regressive distribution of benefits than is the private sector in the distribution of ‘privately funded’ benefits, if the society under study is one that accepts that the state is morally required to be more representative and supportive of the egalitarian principles of democracy than ‘the market’. The
author lays this oppositional dichotomy of ‘state’ vs ‘private’ interests in distribution down as a principle empirically observable in the United States but also across the OECD countries to varying degrees.

Nonetheless, let us state a further normative claim that ensures these differences between ‘public’ and ‘private’ are not overstated as absolutes. This is that state policy should not ignore the fact and effect of providing state legal protection and the economic, institutional and operational substrata support to the private sphere that often produces remarkably unequal distribution of retirement benefits (as we have seen in the previous chapter) in the private pension system. Even more so in a nation that provides for tax subsidies for ‘private’ funding of pension benefits, no democratic citizenry can legitimately place a question about the distribution of pension benefits beyond its public responsibility to review and consider, as an exclusively ‘private’ event.

4. **Reliability or ‘Coverage’**, the last of the overall benefits objectives, is the level of certainty or uncertainty that one will receive a benefit, or a predictable amount of benefit. A plan or system that covers a higher proportion of individuals (whether of employees, citizens, or what-have-you) is one that has a high level of coverage. A plan that only provides a certain level of benefits to some individuals and not others has a coverage problem as well. This criterion gets to the heart of the level of income security the national pension system attempts to insure, when married to the first objective of providing basic and replacement income. Retirement income security is
mainly about how much and how secure the income is. Unreliable income is a sign of a failing system. The percentage of the population receiving a benefit is at least as important as the amount of benefit received by those receiving it.\(^{16}\)

A main point of noticing the difference between the basic benefit objective and the replacement income objective is to acknowledge that the general purpose of occupational retirement plans or individual savings plans is to provide income in addition to the basic benefit (generally provided by the closest equivalent of the Social Security system). Occupational retirement benefits are primarily designed to produce at least a partial replacement of pre-retirement income, which results in a less significant drop in consumption when work stops than would be the case in the absence of these retirement programs. This part of the benefit is often less predictable as to rate, permanence, incidence across the population, or dollar amount than the basic benefit, which is generally funded through state programs of social security and which tend to be more universally available based on citizenship or a standard term of working life (such as 40 quarters of working compensation for Social Security, for example, in the United States).

\(^{16}\) ‘Coverage’ and ‘reliability’ are represented as ‘benefits objectives’, but recognize that either can be threatened by funding problems. Still, funding is tied up with the level of promised benefits, and it is usually the promised benefits that are adjusted when funding is not commensurate with the mandated benefits level. The ‘funding’ part of the same problem is handled under ‘Moral Justifiability’, explained in the next section.
II. FUNDING OBJECTIVES

Let us turn now to the funding of retirement income or benefits for a second set of objectives for an ideal retirement income security system. There are many different ways to fund these benefits, but there would seem to be some general principles that need to be followed if the society that is both benefitting from and supporting the retirement income security system is going to be able to justify it on fair and broadly egalitarian grounds. Such a society also needs to design a retirement income system in such a way that it does not provide disincentives to meeting higher savings and other behavioral objectives helpful to either or both individuals and the country, for example. Finally, the society will also want a robust and efficient funding structure that is responsive to changing economies and demographic requirements.

5. **Fairness.** A retirement income system’s funding is ‘fair’ if it is sourced morally justifiably, e.g., funding flows from younger workers to older workers but taking into account intergenerational equity (e.g., assuming younger workers will eventually benefit), or funding is sourced from nonregressive taxes (more generally, on a basis that shares the burden so that it is equitably borne), or funding is based on a system that recognizes differences in individuals’ ability to pay. The general notion is that funding should be fair and reasonable, and sensitive to the varying circumstances of individuals and families.

Another central tendency to examine that falls under this heading and which needs to be compared across nations is the level of commitment to old age security that is
exhibited by a national society. A democratic society that supports a retirement income security system that performs poorly on these overall objectives must answer a standing challenge to its being a fair society at all.


Behavioral objectives require us to imagine how pension institutions may have both positive and negative consequences that impact a nation’s citizens and institutions, other than the benefits and funding themselves. More simply, pension systems that promote ‘good’ behavior by design are better than those that promote ‘bad’ behavior amongst the people who are either supporting them or benefiting from them. For example, designs that promote collaboration and social inclusion are ‘good’ under this mantle of comparison, and those that produce social tension and which promote social exclusion are ‘bad’. Incentives embodied in pension design need to be assessed in terms of their evidencing and supporting of healthy, virtuous lives and cooperative, coordinated, inclusive and ethical societies.

These objectives or standards will henceforth be referred to as the **Six Objectives of Retirement Income Security Systems**. These criteria will be used in the comparisons of national elderly income security systems for France, Japan, Sweden and the United States.
COMPARISON OF FOUR NATIONAL PENSION SYSTEMS (SWEDEN, FRANCE, THE UNITED STATES AND JAPAN) BASED ON THE SIX OBJECTIVES

INTRODUCTION

Now let us take the six criteria for comparison, namely the four benefits objectives and two funding objectives, and thread each of the four comparison countries through them to see how each measures up.

As we take these measurements, we should also be trying to understand how and why certain countries do better than others on each of the criteria. In some cases, the welfare typologies we reviewed at the beginning of the Chapter provide some clues. The actual histories of each examined country, however, may also contain some elements that are ‘atypical’ of its welfare state type, some of which might help to explain portions of the story behind the choices a particular nation has made to provide the current structure of its retirement income security system. Finally, we need to question the reason why something that seems to be working somewhere else might not also be useful to the United States, and what might be the chances that the United States could learn from it in some way, or even institute its design in some form or other.
Let us first start with the ‘basic benefits’ objective which is universally the province of the state in the OECD countries under study.

The basic benefits are sometimes called first tier and are often redistributive, as Social Security is in the United States. Basic benefits may also take the form of targeted benefits (which are redistributive) or may be flat rate or based on a number of working years in employment. They generally have as their main objective to keep individuals from falling into poverty. (Whitehouse, 2007, p. 8).

In France, as in the United States, the basic benefit is subsumed under its public social security system, which also like the United States, is a compensation earnings-based system with a redistributive component. The French public pension targets a 50% replacement rate for full-career (in excess of 40 years) earnings. This is based on pay averaged over 25 of the best earnings years. (OECD, 2011, pp. 228-229).  

In Japan, there is a basic pension that corresponds to roughly 15% of average earnings, indexed to prices. However, there is on top of this a form of social assistance (which is

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17 Data for this comparison is based on 2010 data.
available to citizens in general) that amounts to close to 20% of average earnings for those between the age of 60 and 69. (OECD, 2011, p. 259).

Sweden’s basic pension is targeted at about a 25% of average earnings, but this ‘basic’ pension is really a “top-up” to guarantee a minimum level of pension benefit after all other sources are taken into account, so it is really a minimum guarantee (Whitehouse, 2007, pp. 113-114) and (OECD, 2011, pp. 304-305).

The United States, as explained in Chapter 2, has a Social Security system that provides a net replacement rate of approximately 40% of pre-retirement earnings, based on 40 quarters of work, but the replacement rate is higher among the poorest workers, a progressive feature.

Perhaps the best, practical way to determine the success or failure of these systems on the basic benefit or poverty reduction criterion is to use a standard measurement of poverty. We can then measure the degree to which the number of poor is minimized in a comparison of all four systems.

**OECD Income Poverty**

As pointed out in the first chapter, the primary definition of poverty used for international comparisons is that of income poverty, generally stated as income below a
certain percentage of median household income, adjusted for the size of the household. Due to the general use and acceptance of this type of definition, as well as the profligacy of data accumulated by that organization, the OECD definition will be used for many of the following international comparisons.

In the specific OECD definition, we start with household disposable income in cash after taxes (imputed rents of homeowners, for example, are not included). Individuals are attributed the income of the total household where they live. There are adjustments for household size based upon an equivalence formula that doesn’t distinguish between children or adults and that assumes that economic needs increase at a rate that is proportionally smaller than the rate of increase in the size of the household. (OECD, 2008, pp. 24,47). In other words, it recognizes efficiencies in consumption that can be achieved by larger households.

“Poor” under the OECD definition is anyone who belongs to a household whose income is less than one-half of the median national income. Thus,

“the use of a relative income threshold means that richer countries have the higher poverty thresholds. Higher poverty thresholds in richer countries capture the notion that avoiding poverty means the ability to access the goods and services that are regarded as customary or the norm in any given country.” (OECD, pp. 42,68.)
All of the criticisms that were made about relative measures in the First Chapter are relevant here, but the ideal of an absolute poverty measure applied across dozens of countries is impractical, if even possible. Similarly, most of the basis of comparisons will be in the form of currency, and in particular, US dollars. The OECD, World Bank, IMF and other international agencies and institutions most certainly do measure characteristics of societies by other means than financially standardized currency (this research will generally use a US denominated currency). However, when comparing data which is ultimately related to the funding, taxation, payment, budgeting or transfer of money and wealth which is the primary focus of public administration and public policy, and which provides the general perspective of this research, there is no substitute for financial information as a basis for comparison, and that is what we will use.

**Poverty Comparisons**

Across the OECD countries, the average rate of poverty for the elderly, which is defined as people over the age of 65 for these purposes, is 12.8%, and the average poverty rate for people of all ages is 11.3% for 2010. That compares to the 19.9% and 17.4% respective rates of poverty for the United States. That is, the number of people over age 65 who are living in poverty in the United States, using the one-half of the median national income threshold that is used in the OECD measurement, is about 55% more, as a proportion of the total over age 65 population, than the average for all OECD countries \( \frac{(19.9\%-12.8\%)}{12.8\%} \).
In fact, the rate of poverty for over-65 year olds amongst the nations of the OECD is worse than the United States in only 5 countries – Israel, Switzerland, Mexico, Australia and Korea. See Figure 1, entitled *Poverty Rates for the OECD Countries, Over Age 65 and Older and for All Ages* and Figure 2 to compare rates across the OECD. Both are ordered from the lowest to the highest rates of elderly poverty.

The poverty rates for Japan are very close to those for the United States, 22% for those over the age of 65 and nearly 15% overall. France’s rate of 8.8% for those older than age 65 and 7.1% overall are significantly different from the rates of poverty for the United States and Japan, but Sweden’s rates are even smaller, at 6.2% and 5.3% respectively for those older than age 65 and overall. These relative rates are generally consistent with welfare statist predictions for the type and extent of welfare programs that distinguish the three welfare state typologies of the 4 countries under study.

The liberal nations of Japan and the United States tend to be less supportive of interventions into the market system which produces large pockets of poverty, while the corporatist and social democratic systems of France and Sweden are much less tolerant of large segments of poor citizens. The two latter countries are more willing to intervene between the market and ultimate resource allocations in order to diminish the level and incidence of poverty.
FIGURE 1: DATA FROM OECD (OECD, 2013, P. 165). POVERTY IS DEFINED AS THOSE LIVING ON INCOMES LESS THAN HALF THE MEDIAN FOR THE NATION

It turns out that there is also a strong relationship between the relative standing of the overall poverty rate of a country and the poverty rate of that country’s elderly. The correlation is positive and the correlation coefficient is approximately 74% with South Korea excluded as an outlier (Author’s calculation).

Thus, the principle that the relative poverty position of the elderly is highly contingent upon the relative poverty position of the national society as a whole is evidenced by the data. That fact puts Japan and the United States at a real disadvantage in terms of their elderly poverty levels, because they are not likely to improve the status of the elderly without having to raise the standard for all, if the relationship of overall poverty to
elderly poverty holds. This is arguably an even harder problem than raising the elderly up alone as it would require more universal welfare programs or other methods for redistribution of income and wealth across the entire population, not just the elderly.

![Poverty Rates: OECD Countries (2010)](chart)

**FIGURE 2**: BASED ON DATA FROM PENSIONS AT A GLANCE, OECD 2013, INCOME POVERTY RATES, P. 165 (PERCENTAGE WITH INCOMES < 50% MEDIAN)

When all is said and done, Japan and the United States score poorly on this measurement of poverty. Sweden and France score better on these poverty measurements than the average OECD country. Sweden is bested by France on this criterion, but the difference is so insignificant that we will treat them as co-equal, high performers on this criterion.
On the ‘basic benefits’ criterion, then, a running chart of national comparisons on each of our criteria starts out looking like the figure below. Checkmarks indicate the ‘winner’ or ‘winners’ for the particular criterion objective.

<table>
<thead>
<tr>
<th>BENEFITS OBJECTIVES</th>
<th>France</th>
<th>Sweden</th>
<th>Japan</th>
<th>US</th>
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<td>Basic Benefits/Poverty Reduction</td>
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<td>Replacement Rate</td>
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<td>Progressivity/Regressivity</td>
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<td>Behavioral Objectives</td>
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**BENEFITS OBJECTIVES: MAINTENANCE OF CONSUMPTION LEVELS, OR THE ‘INCOME REPLACEMENT’ OBJECTIVE**

Besides poverty reduction as a benefits objective, a retirement income system has an objective of maintaining in its citizenry the ability to maintain a consumption level, after their working life has ended, that is close to their pre-retirement level. Before comparing their success or failure rates on this particular criterion, we should take a moment to describe the ‘rest’ of each country’s retirement income system which is mainly focused on worker’s earnings replacement. Again, this is the part of the retirement income
system that generally is not directly supported (paid for) by the state, and which is usually connected to one’s employment.\textsuperscript{18}

Japan and the United States are two of the countries in the OECD that have, effectively, one state mandatory retirement system that encompasses both ‘basic’ and ‘income replacement’ benefits objectives. In the United States, that is Social Security, which has a redistributive element but which also bases its benefit on the level of payroll contributions which, in turn, is based on the level of wages one has earned through most of one’s entire career. In Japan, the mandatory plan is similarly a state-provided benefit, with a basic benefit and an earnings-related component based on the level of working compensation.\textsuperscript{18} (OECD, 2011, pp. 259-261). Notably, neither system has mandated workplace or ‘occupational’ pension benefits through private firms, although such plans may be provided on a voluntary basis by employers. This reliance on but one pension source for the mandatory provisions of benefits is a characteristic of 21 of the 34 OECD countries. We will discuss other aspects of these mandatory private occupational plans in a moment.

\textsuperscript{18} Net replacement rates used for this analysis project benefits as a share of lifetime average earnings, “revalued in line with economy-wide earnings growth”. The replacement rate thus approximates the last wage income received (before retirement) if the wage income has grown in line with average earnings growth (incidentally, the Social Security system makes the same adjustment in the determination of its benefit).

The rates used here are those of the OECD’s pension models and assume workers enter the labor force in 2012 at age 20 and work until the normal full retirement age of their respective countries. Another assumption is that the laws in place in 2012 will not change. Net replacement rates take into account income after taxes and after payroll deductions. Price inflation is assumed to be 2.5% per year and real earnings growth to be 2% per year. The investment rate of return is assumed to be 3.5% annually, after inflation. The benefits are assumed to be paid in the form of an inflation-indexed annuity purchased at an “actuarially fair” price for funded pensions. (OECD, 2013, pp. 66, 131-132).
Japan’s and the United States’ public retirement plan benefits are partially based upon valorized working compensation earnings, meaning that the benefit level reflects changes in average net real compensation earnings that occurred during the working life of the beneficiary (until age 60 in the United States). In the United States, the benefit is based on the average earnings for the 35 highest earnings years, and in Japan, on 40 years of contributions, with benefits proportionately adjusted for shorter or longer durations. (OECD, 2011, pp. 259-261, 322).

Turning now to the two European countries in our list of 4 target nations, France is yet another country in the OECD that has no truly mandatory private occupational pension plan offered through the private sector, at least under the OECD definition. Though this is how it will be treated in terms of pension categories for the remainder of this section, it should be realized that most full-time French employees are, in fact, covered by an occupational system that is compulsory, and for that reason, it is not difficult to think of France as if it had a mandatory occupational system, but one that is public rather than private. 19

At the most basic level, France has a minimum pension that provides a benefit of up to 50% of average earnings for those over age 60 (this is gradually going to be raised to 62

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19 The OECD does not treat France as if it had a mandatory private occupational pension system, although France’s ARRCO and AGIRC pension scheme covers private and agricultural sector employees and the contribution rates, for both employers and employees are based on wages, and the system is compulsory. However, for purposes of some of the comparisons in this section, the author has not included France in either the set of countries that has mandatory private occupational pensions or the set of countries that do not, because France does not easily fall into either category, based on OECD categorizations. However, when we speak of ‘mandatory’ or ‘public’ programs, for France we mean to include both public programs and the ARRCO and AGIRC pension schemes that are ‘public’ in the sense that they are administered by the state but occupationally-based in the sense that their contributions are based on wages and the individual’s status as an employee. (OECD, 2013, p. 252).
and over time, to age 67) and over if they have worked at least 41.5 years (this amount is pro-rated for those who have worked less). (Centre des Liaisons Europeenes et Internationales de Security Social (CLEISS), 2013). The basic scheme is financed through payroll contributions and some state subsidies. (Guardiancich, 2010, p. 3).

The mandatory occupational pension plan is administered through shared employee/employer contribution arrangements. In the French private sector (about 65% of the labor force), employees’ pensions are administered by the Association for Employees’ Supplemental Schemes (“ARRCO” in French). There is another scheme covering executives and managers under the General Association of Retirement Institutions for Executives (“AGIRG” in French). (Centre des Liaisons Europeenees et internationalaies de Security Sociale). The public sector workers, representing about 20% of the labor force, also have pension coverage beyond the mandatory system that is the focus of this section. Non-salaried workers and the self-employed, representing 12% of the labor force, have yet another plan, which is less generous than the ARRCO and AGIRC systems (Guardiancich, 2010, pp. 1-4). Contribution rates are between 6% and 7.5% for ARRCO and 16%-20% for AGIRC and are shared by the employer and the employee.

Finally, Sweden has a public system that covers universally and is based on the individual’s lifetime earnings (similar to Social Security). It includes a guaranteed pension that is designed to provide funding if the income received in retirement is below a poverty threshold (unlike Social Security, Sweden has this additional ‘needs-tested’ program). This ‘top-up’ of 24% of gross average earnings means that if all pension
income received is less than that 24%, the difference between the top-up and the income available is paid as a benefit. (OECD, 2013, p. 344).

Sweden also has a mandatory private occupational plan that puts it relatively high on the list in terms of replacement rates, with employer and employee equally-shared contribution levels of 18.5% (with the employees’ contribution rate levied only on wages below a ceiling, which is equal to 150% of the average wage). 16% of this contribution amount uses a PAYGO funding method (like Social Security) that funds current retirement benefits (also like Social Security). However, a notional defined contribution plan ‘keeps track’ of the benefits earned by an individual employee. These are the (notional, not funded) benefits that employees can eventually claim at retirement.\(^\text{20}\) Benefits adjust to life expectancy increases automatically, with the result that as life expectancies increase, so must retirement ages (those born in 1980 need to defer retirement for at least 2 years longer than those born in 1940 who retire at 65 with a full benefit, in order to be provided with the same level of benefit). (Sunden, 2006, p. 139).

The other 2.5% of the 18.5% contribution is credited to an individual account for the participant. This part of the program was introduced in 1998, and is called the Premium Pension. The responsibility for investing the Premium Pension account is the

\(^{20}\) This type of plan is called ‘notional’ because even though contributions are recorded to an employee’s account along with an earnings amount, the account is really just a way of showing the benefit the employee will have earned at retirement (the Social Security Administration sends out such projections as well). The actual money represented by the contributions is going to fund current benefits for the retired. The earnings rate is set equal to the real wage growth (again, like Social Security benefits, Swedish retirement benefits are therefore reflective of real wage growth).
employee’s. This type of ‘individual account’ scheme is indicative of the mandatory private occupational plan systems of several OECD countries. The Swedish individual account scheme faces some of the same difficulties that participants in the United States private voluntary system face. There are more types of funds to invest in (700) than the average participant can really handle, and because of this, there may be higher fees associated with the greater selection. There are also default funds which are used for participants who do not positively elect particular investments. (Palme, Soderlind, & Sunden, 2007, p. 637).

Sweden is the only one of the four nations we are comparing that has a mandatory private occupational plans in the sense of individual employee accounts funded by employers and/or employees (but again, France has plans that are based on employment in occupations and which are funded by employer and employee contributions and so are a sort of ‘hybrid’, as previously explained). We will say more about mandatory private occupational plans in the very next section. (Lindquist & Wadensja, 2011, pp. 240-243).
Figure 4 shows net pension replacement rates for the four countries in the major comparative analysis. The most important caveat to state about this presentation is that it includes a post-retirement replacement rate taking into consideration only mandatory pension income – income from the combination of the mandatory public system and any mandatory private occupational system. In the United States, that is Social Security ONLY. As we will see in a moment, many countries have, in addition to a publicly funded system of social security, mandatory occupational private pensions (or pensions that have such near-universal coverage that they are treated as mandatory for purposes of these presentations), and these mandatory private pensions tend to beef up the replacement rates above the United States’ simply because the U.S. private retirement income security system is so predominately a voluntary pension system in terms of employee participation, contribution levels, and firm sponsorship.
FIGURE 4: NET REPLACEMENT RATES FOR PUBLIC AND MANDATORY PRIVATE SYSTEMS FOR FOUR COUNTRIES, BASED ON OECD PENSIONS AT A GLANCE, P. 143. (OECD, 2013). ‘AW’ STANDS FOR ‘AVERAGE WAGE’.

Note that France’s system of public support and occupational retirement plans which cover most private sector workers are represented here as part of the mandatory system, and France stands at the top of the list in terms of replacement rates across the wage categories. Sweden is somewhat behind, while Japan’s and the United States’ public systems are the only mandatory means of support and fall quite a bit short of the other two systems on this criterion.

Presenting the data as in Figure 4 helps to illustrate an element of ‘reliability’ that we held as important in the introduction to the criteria to be used in this section. As can be seen, and depending upon the relative wage one earns during a full career, a United States worker, on average, can plan on a net replacement rate of around 56% at half an
average wage rate, 45% if earning an average wage, and about 40% if earning 150% of the average wage over his lifespan. Of the four countries we are concentrating on for this comparison, only Japan ranks lower on replacement rates. The median replacement rates are 42.5% for Japan, 49.9% for the United States, 55.3% for Sweden, and 72.3% for France (not shown). (OECD, 2013, p. 141).

On average, the OECD tends to provide significantly higher net replacement rates than the United States through its mandatory private pension schemes (not shown). The average earner of an OECD country should attain about 64% of his pre-retirement wages through the mandatory pension systems in place, with those earning less than 50% of the average wage expected to attain a 79% net replacement rate. (OECD, 2013, p. 143).

As we may have expected under Esping-Andersen’s welfare state typology, France and Sweden, the ‘corporatist’ and ‘Social Democratic’ models, have higher state-supported replacement rates (which include both the Public and the Mandatory Private systems) than the ‘Liberal’ model of United States and Japan.21

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21 By state-supported is not meant that the funding necessarily comes from the state, but that the state enforces or mandates levels of support from private firms and/or workers through law
DO MANDATORY PRIVATE PENSION SYSTEMS BOOST REPLACEMENT RATES?

For our purposes in examining and comparing the various net income replacement rates, it needs to be pointed out that they tend to be higher, on average, for those countries of the OECD that have BOTH a public pension system AND a Mandatory Private Pension system, of which Figure 5 provides more data in support.

This may be due to the fact that many public pension systems, like our Social Security system, have as their main objective the reduction or elimination of poverty or the provision of a basic benefit, not an income replacement objective. The private pension systems, however, are often aligned with a replacement rate objective, and thus help to ‘top off’ the basic public pension with benefits that bring the overall replacement rate significantly higher than countries that only have one mandatory system – the public one, such as the United States.

FIGURE 5: NET REPLACEMENT RATES OF THE OECD COUNTRIES WITH AND WITHOUT MANDATORY OCCUPATIONAL PLANS (BASED ON (OECD, 2013, P. 143) (AUTHOR’S CALCULATIONS)

<table>
<thead>
<tr>
<th></th>
<th>With Mandatory Occupational Plans</th>
<th>Without Mandatory Occupational Plans</th>
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<tbody>
<tr>
<td>Mean</td>
<td>68.1</td>
<td>61.2</td>
</tr>
<tr>
<td>Median</td>
<td>67.7</td>
<td>59.9</td>
</tr>
<tr>
<td>Count (# OECD countries)</td>
<td>13</td>
<td>21</td>
</tr>
</tbody>
</table>
While the differences in the net replacement rates between the population of OECD states that have mandatory private occupational pensions and those that do not are significant, as pointed out in Figure 5, there are many examples of nations that have relatively high replacement rates based on their public plans alone. Austria and Turkey manage to have among the very highest net replacement rates even without any mandatory private schemes, and some of the states with no mandatory private schemes are the most generous toward the lowest earners. In the case of Turkey, for example, the net replacement rate is over 100% for those earning one-half of the average wages. Citizens may very well live materially better in retirement than they did during their working lives.

Nonetheless, it may be an important point that there is an obvious tendency for nations that mandate both a public and a private occupational pension (with required contributions) tend to provide higher levels of replacement rates than those that do not, at least among the OECD 34 nations. Australia, Denmark, Israel, and Netherlands have mandatory occupational systems, and they all supply those earning one-half of the average wage replacement rates of over 100%.

Although we can only speculate at this point why this might be, it likely has something to do with several factors.
First is the fact that the mandated plans and contributions significantly counterbalance the tendency of employees (and employers, if employer contributions are mandated) to under-contribute to voluntary, funded retirement accounts on their own volition (assuming voluntary private plans are available).

We might also speculate, as the second reason that mandatory contributions are associated with higher replacement rates, that there is a maximum level of public social expenditures for retirement that citizens are likely to support, and therefore a ‘nonpublic’ method (e.g., employer/employee occupationally-based retirement savings plans) of funding may be an important way to boost overall retirement funding.

A third reason mandatory occupational plans may be associated with higher replacement rates, however, is that pre-funding provides a means for providing retirement income over and above whatever a given nation's PAYGO system can produce. A Pay As You Go System is one that takes in contributions (usually payroll taxes) and immediately pays them out to beneficiaries. This is how our Social Security system works. Countries with a mandatory private system essentially increase the level of contributions over and above those of their existing PAYGO system, and this helps to generate an additional retirement income source, leading to higher income replacement rates.
But there is yet another reason that pre-funding might be seen as a healthy addition to whatever source a country might be relying on to fund its basic pension benefit. Pre-funding has a natural tendency to produce contributions that are closely tied to the average wage level of the particular employee, which simply means that it naturally reflects the actual wages paid to an employee, a key component of the replacement rate formula. In addition, contributions to a pre-funded plan are generally described as a percentage of compensation. Therefore, the benefits those contributions produce will just as naturally reflect the actual wages paid to an employee, with a direct link between wages and contribution level to the benefits as a percentage of pre-retirement income, otherwise known as the replacement rate.

Let us take an example that shows how pre-funding via contributions based on salary is particularly adept at producing replacement rates that reflect the employee’s wages. If two employees contribute the same percentage of pay and obtain the same real rate of investment return in a pre-funded account, each employee will receive exactly the same benefit as a fraction of his pre-retirement income, no matter how much their retirement savings balances may be different. Because contributions to a pre-funded plan are often the same fraction of their different pre-retirement income pay (at least in a mandatory private plan), the employees get the same replacement rates if all else remains equal. Pre-funded contributions produce benefits that are more directly related to the individual’s average pay and contribution rate than a PAYGO system of funding.
Pre-funded contributions, especially those with a mandatory minimum rate as a percentage of salary, are thus better suited to deal with the problem of achieving a high replacement rate than PAYGO contributions, which are generally concerned with providing basic pension benefits and which also must simultaneously manage the fact of increasing beneficiaries (older people receiving old-age benefits) in the context of a decreasing percentage of workers who actually pay those contributions. (Palier, 2007, pp. 94-95).

There is even one further reason that a mandatory contribution private occupational plan may lead to increased contribution rates. That is that it is very easy to see the relationship between contributions and benefits in a mandatory private plan. In a PAYGO system, contributions become benefits paid to others. The size of those benefits doesn’t necessarily translate ‘back’ to the contributor, because he or she is years away from retirement, and because there is no easy way to draw a close connection between the contributions made and the benefits being paid someone else.

But in a mandatory private plan, contributions are understood to produce benefits for the contributor. If benefits seem to promise (or prove) to be inadequate, there will be a tendency on the part of the contributor to support higher levels of contributions. Higher levels of contributions translates into higher levels of benefits which means higher replacement rates.
For all these reasons, this notion of mandatory occupational plans supplying a vital funding improvement that is associated with increased replacement rates is something worth remembering when we begin to construct possible reforms for the United States retirement income security system, a system that seems handicapped to achieve universal coverage and adequate income replacement rates, at least as it is currently designed.

Let us now take a closer look at the footprint of the United States’ voluntary private pension system in relationship to the entire retirement income security apparatus in the next section, and measure that system’s overall contributions to retirement income security and in relation to the three other countries whose retirement income security systems we are comparing.

**BENEFITS OBJECTIVES: VOLUNTARY PRIVATE PENSION SYSTEMS’ REPLACEMENT RATES**

‘Topping off’ all the sources of retirement income just described are the private, voluntary defined contribution pension systems that are prevalent (covering between 40% and 65% of the workforce) in 9 of the OECD countries. Those countries are Belgium, Canada, Czech Republic, Germany, Ireland, New Zealand, Norway, the United Kingdom and the United States. (Note that other countries may have voluntary pension systems, but they are not listed here as they do not cover as significant a proportion of the population). (OECD, 2011, p. 126).
Thus, three of our comparison countries do not have significant usage of private, voluntary plans. Their net replacement rates after the inclusion of voluntary pension plans are the same as in Figure 4: At the average wage level, the net replacement rate for France is 71%. For Sweden it is about 55%, and for Japan it is about 41%. The United States comes in at about 45% without the inclusion of voluntary private plans, and 89% with the inclusion of voluntary plans for those participating in them.

But though the United States has the highest average net replacement rate for those using these voluntary private plans amongst the OECD nations that use these plans significantly, these voluntary private plans, as we have already seen from Chapter 2, are disproportionately the province of the higher income cohorts. It should be kept in mind that these average net replacement rates that include voluntary plan coverage only apply to those who are covered by a private firm retirement plan.

These results are based on models that make projections that are derived from the 2012 states of retirement plan legislation. A projection model approach is used, and in many cases for the voluntary pension systems, contribution rates categorized by earnings levels are not available. An average contribution level across the earnings spectrum is assumed instead for the voluntary contribution portion. For this reason, the replacement rates that include information for voluntary defined contribution plans should be viewed with some skepticism, for we have already seen in Chapter 2 how contribution levels are positively correlated with the level of compensation and income, and these illustrations do not always reflect that fact (e.g., replacement rates for those
with higher incomes are probably understated, and those with lower incomes, overstated). The replacement rates are based on workers earning average wages. (OECD, 2013, p. 142).

When we order the net replacement rates from lowest to highest in terms of mandatory pension systems, as in Figure 6 (and without including the United States’ voluntary occupational pension system), we note that Japan and the United States – the ‘Liberal’ countries under Esping-Andersen’s theory of welfare state typology – are at the bottom. So the theory of Esping-Andersen would have predicted.

**FIGURE 6: BASED ON DATA FROM OECD PENSIONS AT A GLANCE, P.143 (OECD, 2013). JAPAN AND SWEDEN DO NOT HAVE A SIGNIFICANT AMOUNT OF PRIVATE VOLUNTARY PLANS AND SO THEIR ‘TOTAL’ REPLACEMENT RATES ARE THE SAME AS THEIR ‘MANDATORY’ ONES. (FRANCE’S RATE INCLUDES THEIR OCCUPATIONAL PLANS, WHICH COVER MOST EMPLOYEES AND ARE COMPULSORY). NOTE THAT THE US ‘TOTAL’ INCLUDES THOSE WITH VOLUNTARY PLAN COVERAGE, AND IS NOT AN APPROXIMATION OF REPLACEMENT RATES FOR THOSE WITHOUT SUCH PLANS.**
France, at 71%, and Sweden, at 55%, seem significantly higher in terms of replacement rates as compared to the United States’ 45% and Japan’s 41%. At the same time, if you look at the ‘Total’ replacement rate which includes voluntary pension coverage, the United States hovers among the top income replacers for those who are covered under a private pension plan, which we have seen from the second Chapter, are predominately distributed amongst the top half of the income scale.

If you include the voluntary plans of the United States and their contribution to total replacement rates, the United States would seem to win on the replacement rate criterion.

WHO WINS ON REPLACEMENT RATES?

But who gets the replacement rate matters as much as the size of it, and considering the spotty coverage of voluntary pension plans for the United States, and the unequal distribution of benefits and the absence of significance of private pension benefits in the lower income categories, it might seem fairest to award the winning trophy for this criterion to France and Sweden equally, for their systems are so significantly superior to those of Japan and the United States in another sense—who gets the replacement rates—that their differences do not seem so important.

Figure 6 shows the French and Swedish systems manage to provide significantly higher replacement rates than those of Japan and the United States before consideration of the
United States’ voluntary pension system, which is only significant to those in the higher income brackets and which is not even available to about half the workforce at any time. By providing higher replacement rates across the income spectrum, France and Sweden provide for a more progressive distribution because those in lower income brackets do not need to find as much income sourcing *outside* the mandatory system.

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**BENEFITS OBJECTIVES**

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<th></th>
<th>France</th>
<th>Sweden</th>
<th>Japan</th>
<th>US</th>
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<tr>
<td>Basic Benefits/Poverty Reduction</td>
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**FUNDING OBJECTIVES**

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<td>Behavioral Objectives</td>
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**BENEFITS OBJECTIVES: PROGRESSIVITY/ REGRESSIVITY**

The Progressivity Index, a measurement used by the OECD to gauge the relationship between a distribution of benefits to other criteria, such as income or compensation earnings, uses a ‘100’ reading to indicate that the pension system benefit is not tied to earnings level, and ‘0’ to indicate that the amount of the pension benefit is entirely
correlated to earnings levels. A high reading on this scale indicates that the pension benefit is not based on earnings history (it is close to being a ‘flat’ benefit, one that is the same for everybody), and a low reading indicates that the pension system is mainly geared to providing replacement income, or in other words, a level of income that is directly related to the amount of wages earned by employees. The Progressivity Index is 100 minus the ratio of the Gini coefficient of pension entitlements divided by the Gini coefficient of earnings. (OECD, 2011, pp. 136-137). The GINI coefficient rises with inequality. Please see Figure 7.

France and Sweden seem to be somewhat less focused on distributional equality as defined on the Progressivity index, than the United States and Japan. This is a surprising result considering the fact that the United States and Japan are ‘liberal’ states under the welfare state regime analysis, which generally are not focused on correcting material distributional inequalities. Again, Sweden’s regressive reading on this criterion is wholly unexplainable from its position as a Social Democratic country in Esping-Anderson’s typology of welfare states. 22

22 Nevertheless, on broader measures of income inequality, Sweden still enjoys the second position, after Denmark, among the OECD nations that have the lowest Gini coefficient (another measure of progressivity/ regressivity but one which increases as the level of progressivity increases) on the level of disposable household income, adjusted for household size. (OECD Economic Surveys, 2011, pp. 32-33). Lindquist and Wadensja cite Selen and Stahlberg (Selen & Stahlberg, 2004) in explaining that the compression of the wage structure and “leveling out” that occurs as a result of other factors of the Swedish social insurance and tax systems may have led to employers and employees agreeing to raise the retirement benefit level for higher-paid workers, as a counteractive maneuver to preserve their preretirement income replacement rates. This would explain the relatively regressive reading for Swedish pension income as opposed to the broader disposable income reading. (Lindquist & Wadensja, 2011, p. 244).
Because the United States and Japan have only mandatory public pensions (Social Security in the case of the United States, the National Pension and the Employee Pension Insurance program in the case of Japan), the evidence in this illustration is that these two countries’ public systems are both quite progressive, and we have already seen that the United States Social Security system is progressive in terms of the way that benefits are disproportionately tilted toward lower wage earners. Japan, as well, achieves a distribution that is not as significantly related to wage earnings as most of the other countries in the OECD, because it is predominately a flat rate basic pension benefit, though it also has a second-tier benefit that is based on earnings as part of its state pension system.

But before giving away too many gold stars to the United States and Japan for being so progressive in their pension designs, it is worth pointing out that we are so far only talking about the state, public system being progressive (again, that is Social Security in the United States, and the National Pension and the Employee Pension Insurance program in the case of Japan). We are not considering the insufficiency of either system to replace pre-retirement income for the general wage earner or the progressivity or
regressivity of their total national pension systems. The first tier of pension systems are generally designed to fight poverty, as we said earlier, and so benefits tend to flow more toward the poorer segment of the elderly population.

But this is not the whole story. We must remember that the relatively better-off individuals of the United States’ system are the ones who most certainly benefit from the private occupational system, as we saw in Chapter 2, and in Japan that tradition is no different. Large Japanese firms have traditionally provided hefty benefits to employees but smaller firms much less so, which means the level of benefit is sporadically distributed. Lump sum retirement benefits estimated at about 38 months of earnings were offered to long-term male employees from large corporations through the late 1990’s, but this tradition has been eroding, as such payments lost their tax advantages in 2002. (Clarke & Mitchell, 2004, p. 175) and (Rajnes, 2007, p. 89). What is replacing these traditional payments at retirement is an occupational system that is voluntary on the part of employers who decide to adopt them, an occupational system with uneven coverage.

The Japanese occupational pension system, for example, covered only 14 million of its 37 million employees under an employer-sponsored defined benefit plan in 2005, but occupational plans which include both defined benefit and defined contribution type plans in 2003 were available at upwards of 84% of firms with more than 30 employees. A significant level of employers are willing to offer these plans, but many employees still work at smaller firms where such plans are not available. Coverage, taking into account
all employees, is estimated at less than 50%. (Ono, 2013, p. 2). This is about the same percentage as for the United States voluntary occupational pension system.

All contributions to the Japanese occupational system are employer contributions (employees are not allowed to contribute), but contributions to voluntary defined contribution plans are limited to less than $3,000 a year if there is also a defined benefit plan provided by the employer and $4,700 if the only employer-sponsored plan is a defined contribution plan. In 2006, the average contribution was only about 4% of salary, not enough to fund a high replacement-rate retirement benefit. (Rajnes, 2007, pp. 92–93). Indeed, OECD estimates that taking into account both mandatory and voluntary systems, Japan’s replacement rate is estimated at less than 60% for low-income workers (those who earn less than 50% of average earnings). (OECD, 2012, p. 102). This fact challenges any notion that the Japanese system is particularly progressive.

In both the cases of the United States and Japan, then, a combination of disparate and relatively low coverage rates from its voluntary private firm occupational pension plans means that the apparent progressivity of their basic retirement benefits systems seems misapplied as a term that could describe their entire national pension system. When variable benefits and low coverage are coupled with our more intimate knowledge of the distribution of contributions of the United States system toward higher-income employees, and the necessary result of the Japanese employer contributions that are often based on a set percentage of salary and only spotty coverage that produces
replacement rates of less than 60% for those earning less than 50% of the average wage, and which benefit higher income employees more than lower income employees, the progressivity of either country’s first tier ‘state’ pension security system begins to diminish in importance against the whole fabric of their national retirement systems.

Let us take a slightly different look at progressivity based on the difference between the replacement rate applicable to an employee who earned the average wage and one who earned one-half the average wage. It seems like Japan and Sweden should take the top spot, with the United States only insignificantly behind. (See Figure 8).

**Replacement Rates by Average Wage and Half of Average Wage for Four Countries:**
Percent Increase of Replacement Rate for Lower Earners as Compared to Average Earners
(Difference = (.5 AW – AW)/AW)

<table>
<thead>
<tr>
<th></th>
<th>0.5 AW</th>
<th>AW</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Japan</td>
<td>54.3</td>
<td>40.8</td>
<td>13.5%</td>
</tr>
<tr>
<td>US</td>
<td>56.2</td>
<td>44.8</td>
<td>11.4%</td>
</tr>
<tr>
<td>France</td>
<td>75.9</td>
<td>71.4</td>
<td>4.5%</td>
</tr>
<tr>
<td>Sweden</td>
<td>68.8</td>
<td>55.3</td>
<td>13.5%</td>
</tr>
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Figure 8: Based on Data from OECD Pensions at a Glance, (OECD, 2013) p. 143

But at the level of the total benefit programs, Sweden – because that nation is providing mandatory benefits that are significantly larger in terms of net replacement rate than Japan and the United States to a high percentage of their employees – should be able to claim the prize. The United States’ position in figure 8 is not significantly different from
either Japan’s or Sweden’s, but its voluntary private pension system is notoriously regressive in its distribution of retirement benefits, as we saw in the earlier chapter.

And as we have seen that the coverage rates in private pension plans in Japan are apt to be similar to those in the United States, though the data are skimpier, there is good reason to characterize Japan has having the same problems with its private, voluntary pension system as the United States - voluntary retirement plans being mainly the province of the well-to-do and higher wage workers. In addition, the coverage rate of the public system in Japan is not universal, as discussed in the next section. A worker getting nothing or very little from a public pension system shouldn’t qualify that system as progressive. This feature of nonuniversality would seem to eliminate Japan from contention to share the top spot with Sweden on this issue.

In conclusion, the Progressivity Index and Gini coefficient measurements used in this chapter may really be more helpful in describing its state pension system (Social Security in the case of the United States, the basic benefit in the case of Japan) rather than the overall progressivity of a retirement plan system that includes both a basic, poverty-reduction benefit and an income replacement benefit. A country that handed out $1 a year to each elderly citizen would attain a 100% Progressivity Index rating using this metric, but not many people would consider that nation’s retirement system to be very progressive by virtue of that.
Therefore we give the star for progressivity to Sweden on this objective, but with due regard to the progressivity of the United States Social Security benefits structure, when viewed in isolation from its total retirement income security system.

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<th>BENEFITS OBJECTIVES</th>
<th>France</th>
<th>Sweden</th>
<th>Japan</th>
<th>US</th>
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<tbody>
<tr>
<td>Basic Benefits/Poverty Reduction</td>
<td>X</td>
<td>X</td>
<td></td>
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<td>Progressivity/Regressivity</td>
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<td>Reliability or Coverage</td>
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<th>FUNDING OBJECTIVES</th>
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<tr>
<td>Moral Justifiability</td>
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<td>Behavioral Objectives</td>
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**Totals**

**BENEFITS OBJECTIVES: RELIABILITY OR COVERAGE RATES**

Coverage rates are another important measurement on the benefits side of pension design, because coverage determines who receives benefits.

We have already explained that mandatory coverage applies to the public and mandatory private pension systems we have examined above. For the mandatory (occupational) private pension plans, this means that employers are obligated to offer the plans by law (OECD, 2005). Social Security and the public systems of France and Sweden cover almost all employees, and the mandatory occupational system of Sweden
covers over 90% of employees. Thus, these mandatory public and mandatory private systems all score high in terms of coverage for these 3 countries.

The situation is different for Japan’s mandatory system of public benefits. Universal coverage is generally required in theory, but it is not achieved under its state pension system. In 2007, half of its independent workers, self-employed workers, and other ‘atypical’ workers dropped out of the national pension program due to an available exemption, lack of paying contributions, or some other reason. These workers will only receive, at most, a minimum pension amount in old age, perhaps based on a means-tested program rather than the earnings-related public program. To make matters worse, part-time workers, seasonal employees, and contract workers are not even covered by the national pension program. (Takayama, 2009, pp. 114-116). Japan is therefore a laggard, compared to the other 3 countries under analysis, when it comes to coverage under its public system.

However, there are also voluntary occupational or personal plans available in many countries of the OECD which need to be considered with regard to the coverage criterion. The voluntary occupational plans are established on a voluntary basis by employers. These plans tend to be extremely important for those countries that have public, or public and mandatory private plans that produce only fairly low net replacement rates for retirees. In some cases, there are also voluntary personal plans, which are retirement plans initiated by individuals, such as an Individual Retirement Account (IRA) in the United States.
Let us take a moment to consider the coverage quality of these voluntary occupational retirement programs and personal plans.

Figure 9 shows the coverage rate as a percentage ratio of those who are eligible to participate in a plan to the working population, defined for these purposes as those individuals between the age of 15 and 64, without regard to employment status (though Sweden’s figures are, instead, a percentage of total employment). (OECD, 2012, p. 105).

Note that Japan has no voluntary private pension system statistics, but it has been estimated that larger firms offered occupational plans of one sort or another. (OECD, 2009, p. 226). Nonetheless, the coverage rates were no higher than in the United States, and contribution rates are only about 4%. (Rajnes, 2007, pp. 92-93). It would not therefore seem to be a significant source of retirement income for a broad cross-section of employees. Which is to say that it has a low quality of coverage.

Sweden has a highly disparate voluntary occupational system that includes benevolent societies and also individual accounts, but there is no aggregated data available for determining coverage of these voluntary plans. However, it has both a public and a mandatory private occupational system which, between them, generate net replacement rates over 55% for the average earner and nearly 69% for those earning half the average salary. This means that voluntary occupational plans are not as important to lifting the
replacement rate of retirement income in Sweden as they are in Japan or the United States, where there are no mandatory occupational private pension plans.

The United States’ (voluntary) occupational system has a coverage rate of less than 50% (Munnell A. H., 2012, p. 3). But because of its relatively low net replacement rates from its mandatory systems (about 45% for the average earner under its public system of Social security, and barely 56% for those earning half of the average wage), its voluntary occupational system is extremely important to increasing the net replacement rates of the overall system. Figure 9 provides coverage data for occupational and personal retirement programs for the four countries under review.

When looking at national retirement income systems as a whole, Japan and the United States score below those of France and Sweden on the criterion of coverage mainly from the point of view of the coverage for its voluntary system (although Japan also shows signs that its public system is also experiencing decreases of coverage, as explained above). Whether or not one may benefit from a private, occupational retirement plan is partially determined on the basis of whether or not one has a private, occupational retirement plan available, and the level of contributions being made.

When the spotty coverage and indefinite contribution levels of the voluntary pensions used in Japan and the United States are fully measured against the higher coverage and
replacement rates of Sweden and France, the insecurities of the ‘liberal’ states suffer in comparison.

Finally, although there are some statistics on the use of ‘IRA-like’ individual retirement accounts, in the United States the bulk of the value of IRAs come from rollovers that are transfers of private pension money to an IRA set up in the name of the plan participant. There were 12 times more dollars added to IRAs in 2010 through these rollovers than contributions made to these accounts. and only about 12% of IRAs received contributions of any type in 2010. (Copeland, 2010, pp. 1, 13). The median holdings for 401(k) (and similar employer-sponsored plans) and IRAs together was less than $50,000 as we saw in the last chapter (‘retirement accounts’), and thus not a significant source of retirement income for at least half the population of workers, though they are the main source of saving for workers. (Munnell A. H., 2012, pp. 1-3).

The use of these types of individual accounts tends to be spotty in most of the OECD countries, but there is no reliable data except for the United States. But voluntary personal pensions or ‘IRA-like’ accounts would not generally be seen as significant safeguards against retirement income inadequacy for these four countries.

The high marks for this objective must therefore go to France and Sweden for the reliability associated with the high coverage rates experienced with their ‘nonvoluntary’
public and (in the case of Sweden) mandatory occupational plans, which provide relatively high net replacement rates for their working population on a mandatory basis.

![Coverage of Voluntary Occupational and Personal Plans (Percent of Working Age Population)](image)

**FIGURE 9: BASED ON DATA EXCERPTED FROM OECD PENSIONS OUTLOOK, 2012, P. 105**

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<thead>
<tr>
<th></th>
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<th>Personal</th>
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<td>5.3%</td>
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</tr>
<tr>
<td>United States</td>
<td>41.6%</td>
<td>22.0%</td>
</tr>
</tbody>
</table>

**Figure 9 (Table)**

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Notes: Not all countries had data for all systems. Coverage is defined as a percentage of working age population (defined as individuals 15 to 64 years old). Though Japan provides for voluntary occupational programs for many employees, as explained above, there is no OECD data on which to base the rate of coverage figures, though Ono estimates it at significantly less than 50% . (Ono, 2013, p. 2). Sweden’s rate of coverage for its voluntary occupational plans is not available. IRAs in the United States are mainly depositories not of new IRA contributions, but rollovers of employer-sponsored plans, such as IRAs. Workers often roll over their occupational retirement benefits to an IRA when they change jobs.
CONCLUSIONS REGARDING PERFORMANCE ON THE BENEFITS OBJECTIVES

Let us now consider conclusions that impact our comparative analysis regarding benefits levels with respect to these four countries and the OECD as a whole.

1. In terms of the basic benefits or poverty reduction strategy of the public pension systems of the four OECD nations under study, Sweden and France win easily over the United States and Japan, the latter two countries of which keep close to one-fifth of their elderly citizens in poverty using the OECD definition, which is living on an income stream that is less than half of national median income. Sweden’s and France’s rates for elder poverty, on the other hand, are less than one-half of the rates for the two ‘liberal’ welfare state countries. France and Sweden also have elderly poverty rates that are significantly below the average for the OECD, which is 13% for those over the age of 65. France and Sweden rate high on this criterion.
2. On the replacement rate objective for the benefits strategy, France and Sweden again shut out Japan and the United States, as the one-source mandatory Social Security systems of both these liberal countries produce, for the average earner, replacement rates in the 40% to 45% range as opposed to the 55% of Sweden and the over 70% range for France. These ranges, of course, refer only to the mandatory pension regimes in each country. Not having mandatory occupational (private) pension plans of the type Sweden has means that Japan and the United States are much more reliant on voluntary occupational plans than the other two countries.

3. In terms of Progressivity or Regressivity of the benefits structures of each of the countries, we have already traced out the considerable progressivity of the United States Social Security System. In fact, the Progressivity Index used by the OECD finds Japan and the United States to be somewhat more progressive in their mandatory, public programs than Sweden and France.

This positive observation however, must be balanced with the negative fact that neither the Japanese nor the United States basic systems do well, compared to the other nations in the OECD as well as the two major countries in this four-way comparison, on the criterion of reducing poverty or on the criterion of the sufficiency or insufficiency of replacement rates, which affect the poor as well as the well-off. In fact, we have already seen how the United States’ private system disproportionately serves the higher-income cohorts, and the very availability of
Japan’s voluntary private system is also skewed toward larger employers. That means a regressive distribution of benefits from the voluntary occupational (private) pension system. These facts must be balanced against the progressive design of the basic Social Security benefit for the United States and the basically progressive retirement benefits of Japan’s state pension system.

Most French and Swedish retirees receive significant benefits from their occupational pension systems. Many Japanese and United States retirees get nothing or very little. On balance, this fact overtakes in importance the progressivity in both of the liberal countries’ state pension systems. From the perspective of the entire system, the result of spotty coverage and distributional inequalities of benefits in the United States’ and Japan’s voluntary private systems mean that lower-income workers only minimally benefit from the private occupational system. For that reason, the entire United States’ or Japanese retirement income security systems cannot be judged to be progressive.

4. Coverage has to be perceived in the context of the fact that those nations with mandatory occupational plans generally have larger replacement rates than those that don’t, suggesting that we be prepared for the fact that Japan and the United States have quite low net replacement rates, which turns out to be the case as discussed above. This fact puts a premium on coverage under other
types of retirement plans by those countries, such as the United States and Japan that have no other provision for pensions under a mandatory occupational system. But that is not what we see in the data.

Instead, we saw that the United States only covers half of its wage employees under a private firm (occupational) retirement plan. Japan’s system provides disparate benefits and spotty coverage under its voluntary occupational plans, and so both Japan’s and the United States’ national systems seem less ‘reliable’ than those with more certain occupational pension benefits or higher levels of coverage.

To conclude, the results of this analysis of Benefits Objectives challenges our two liberal countries’ approach to the provision of retirement security. The provision of public benefits in a progressive manner is not enough to make up for the fact that these ‘public plan’ benefits are not sufficient to supply most retirees with anything approaching an 80% replacement rate, and coverage under voluntary occupational plans is mainly spotty and limited to those earning higher incomes. The ‘market’ reliance of these national designs is not taking care of retirees because there is no insurance that a worker will be covered under a voluntary pension plan, and the voluntary nature of the occupational plans practically guarantees unreliable and inadequate benefits for many former wage earners.
All in all, then, the Swedish and French national pension system models seem to beat those of the United States and Japan when it comes to the Benefits Objectives enumerated at the beginning of this section, with the Swedish and French models deserving of particularly high marks in terms of elderly poverty reduction, and in terms of their high replacement rates achieved through their mandatory public and occupational pension systems. Japan’s spotty coverage and low replacement rates seems to put its national pension system in the last spot on these benefits criteria, with the United States only a few paces ahead of the back of the pack.
Let us now turn to the funding designs for each of the four national pension systems to determine whether or not they can be evaluated as exhibiting high ethical standards in their design.

**Funding Objectives: Fairness Part One: Mandatory Systems**

Let us first describe the funding of the mandatory systems and then examine whether there is an underlying moral justification for them for all four countries under examination.

The Japanese and United States public systems of basic protection are both funded as pay-as-you-go programs, wherein current workers fund payments to older workers, in return for which younger workers exercise claims for similar payments from the next younger generation when they shall attain retirement age. This seems a fair sharing of a burden and a benefit, providing it is understood that any increase of the benefits will require often permanent increases in contributions, and that there is an implicit guarantee to future generations that benefits will not be increased above a level that cannot be permanently carried into those future generations. The concern is that different generations might not equalize the benefit, since the generation of workers supporting the current retirees could conceivably be short-changed by the generation of workers who will support them if there were no moral principles of continuity and equality being maintained over several generations.
To the extent these intergenerational promises cannot be met, of course, making them is morally unjustifiable, and really, morally corrupt. But neither nation has failed to make the promised Social Security or public benefit payments on time. Thus there seems to be in intergenerational commitment that fairly shares both the benefits and the costs of a more secure retirement.

THE UNITED STATES’ MANDATORY FUNDING STRUCTURE

Perhaps what we should do at this point is to look more closely at the reasoning behind the shouldering of a pension benefit on current workers and employers as opposed to other methods of support we could imagine. In the United States, the benefit is paid for by payroll taxes, 50% of which are paid by the Employer and 50% paid by employees. In 2013, the Old-Age, Survivors and Disability Insurance (“OASDI”) program demands contributions from the employee and employer of 6.2% of wages, up to the maximum taxable wage base of $113,700. The great majority of these contributions fund old-age insurance, which pays retirees their old age benefits.

On its face, the fact that Social Security, the bulwark of pension benefits paid to citizens of the United States with substantial working years (or to their spouses) is partly funded by employees seems a fair way of providing benefits that are primarily aimed at them and their families.
The employer’s place in the scheme is more difficult to justify in terms of the traditions of the liberal countries. Is retirement income for employees part of an employment cost that the employer should jointly bear by virtue of that cost’s indivisibility from employment, per se? In other words, does the total cost of employment need to recognize the depreciation of the worker and establish some level of support for that worker in old age? The argument that the employer owes the employee something for loyalty, when he may very well pay more for a new employee than one of many years, falls on its face, and more obviously so when we acknowledge that many employers do not provide a voluntary retirement plan, either for their new or their more experienced employees, out of any sense of loyalty.

This is not to say that no employer is willing to establish a retirement plan because it is moved by a benevolent notion toward its employees to help them manage retirement. But the notion that employers should be made to partially fund their employees’ retirement is not a notion that would seem to be practiced often without either state coercion or historical tradition, and in the United States, at least, there was very little tradition prior to the Social Security Act of 1935 for employer funding of retirement benefits for the average worker. (Altman, 2005, p. 24). As Figures 10 and 11 indicate, the effects of that lack of tradition have not changed. Employer contributions are relatively low in the United States. And they are not much higher in Japan.
Moreover, whatever level of historic traditions of benevolent welfare capitalism might have been practiced by some companies in the United State in the past, there has proven to be, at best, a change in direction by companies toward employee welfare benefits.
Medical benefits, life insurance, defined benefit plans, and investment in worker training have all been cut back in a working world in which job insecurity and ‘personal responsibility’ have replaced the “shared risks” and “shared fate” of employers and employees in a now distant (and partially imaginary) time that extended for a period of about 30 years from the end of World War II. (Hacker, 2008, pp. 59, 65, 66).

In short, there is nothing in the history of the United States to suggest that most employers will provide funding for retirement for the vast majority of workers on their own volition. Nonetheless, the notion that employers should take part in providing funding for retirement is emblazoned in the Social Security Act which binds him to pay about 50% of the total costs of the Social Security benefit through payroll contributions. The argument for the fairness for this may be supported by a sense of proper proportionality in this sharing of the expense of retirement between the employee and the employer that recognizes each has a joint stake in the employer-employee relationship and an equal interest in providing future security once the worker’s useful life has ended.

This sense of fairness is difficult to ground on purely economic principles, however, and so however fair it may seem to be from a worker’s perspective, it may be an elusive goal to hope for employer commitment to it without legal sanctions. The whole society had to implement Social Security and employers were forced to participate. 24 Our experience

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24 One could also argue that the fact that the employer sends the employer portion of Social Security taxes doesn’t mean that he is actually paying it. The true cost may be coming out of wages the employee
with voluntary private pension plans indicates that they will not always be made available if left to an employer decision, and even when they are available, some employers will only make small, or no, contributions.

**JAPAN’S MANDATORY FUNDING STRUCTURE**

In Japan, the funding structure for its basic public pension system is similar to the United States, except that in the United States it is payroll taxes that are automatically deducted from paychecks which is the source of funds. In Japan, individuals are responsible for making their own contributions which can be paid to financial companies, banks, post offices, or convenience stores. There is therefore an administrative burden that is loaded on to the workers themselves for administering the state pension system.

In Japan, some categories of participants pay flat rate contributions, but most private sector employees and governmental employees make fixed rate contributions, just like in the United States. The rate is 18.3%, or a little over 9% of gross earnings paid equally by employees and employers. (Kashiwase, Nozaki, & Tokuoka, 2012). The justification for the funding of the Japanese mandatory public system, then, is the same as for the United States.

otherwise might have received. While this is true in some cases, in others those contributions the employer sends in are either reducing his own profits or being reflected in higher prices, or some combination. In that sense at least, the tax is spread beyond individual employees and the costs are shared with the broader economy.
SWEDEN’S MANDATORY FUNDING STRUCTURE

In Sweden, the insured employee pays 7% of earnings up to a base amount (similar to the United States’ taxable wage base, above which no additional payroll contributions are imposed) and the employer pays an additional 10.21%. However, on the employer portion, there is no base amount imposed, and so the employer’s contribution above the base amount is effectively not connected with any workman’s pension benefit, and that part of the contribution actually goes to fund general governmental expenses rather than to pay retiree benefits. The Swedish government pays the whole contribution amount if the worker is unemployed, so there is no loss in pension credits to a worker during periods of unemployment. (Swedish Pension System, 2012, pp. 4-5).

Obviously in both the Swedish and French system, the participation and funding by employers is much more significant than in the two liberal countries.

FRANCE’ COMPULSORY FUNDING STRUCTURE

Finally, in France, the funding of the public pay-as-you-go benefit derives from the same sources as we have seen in the other 3 countries – payroll taxes on the employee, in this case equal to 6.65% for old age benefits of the recipient, and 8.3% of the same payroll from the employer, up to a maximum limit that is similar to the United State’ taxable wage base. (International Social Security Administration, 2010, p. 101).
SENSE OF JOINT RESPONSIBILITY IN FUNDING: FRANCE AND SWEDEN VS. JAPAN AND THE UNITED STATES

The United States’, Japanese, and Swedish public pension systems are paid for by employee and employers in differing shares, with each making significant contributions. There wouldn’t seem to be any reason to doubt the existence of a sort of common value at work that acknowledges that old age poverty reduction, the usual job of the first basic pension tier of a national pension system, is justifiably the joint responsibility of the employee and the employer at least for first tier or basic benefits.

Clearly, that sense of shared burden breaks down relatively soon after basic pension needs are barely met, in the case of Japan and the United States, while it continues to be operative in the income replacement objectives of the national occupational pension systems of Sweden and France. The proof of this is in the net replacement differences we have already observed amongst the 4 countries, with Sweden and France providing through their combination of state public pension systems and mandatory occupational private systems replacement rates that run significantly ahead of those of Japan and the United States, based on occupational systems that involve significant contributions from employers. Let us take a closer look at those occupational pension systems from the perspective of employers’ contributions to them.

France’s occupational pension system uses a PAYGO method of funding. The Association generale des institutions de retraites des cadres, or AGIRC pension system
for private sector executives and managers, has a 20% contribution rate for the salary above the social security ceiling (the equivalent of the taxable wage base in the United States), and the Association des regimes de retraites complimentaires, or ARRCO, has a contribution rate of 20% for most private sector employees, without regard to the ceiling. The effect for an executive or manager who is covered by both is that their coverage under ARRCO is limited to earnings below the social security pension ceiling, and AGIRC is limited to earnings above it. (OECD, 2008, p. 366).

Contributions are split between employees and employers, with employees contributing roughly one-third of total contributions and employers contributing approximately two-thirds under both systems, but with the exception that the AGIRC contributions that are based on the upper portions of salary (above the taxable wage base) are split between employees and employers based on negotiations between workers and employers at the company level. (OECD, 2008, p. 366). Thus, employers’ contributions are significantly higher than employee contributions in the French occupational pension system. The main point, however, is that employees and employers share responsibility for funding relatively high income replacement rates in France and Sweden, long after the US and Japanese public funding structures have ‘petered out’ and left it to individual employees to fund higher replacement rates.

Under the Swedish mandatory occupational pension system, the systems are fully funded and follow, more and more, a defined contribution scheme rather than a defined benefits scheme. All contributions are shared, and these contributions are negotiated
through labor-employer agreements. Provided that this negotiation process provides for a fair representation of employees’ interests in retirement income, there should be no objections to it on moral grounds, and there may even be some very positive and practical repercussions related to the fact that employers and employees are seen to work together in providing a retirement benefit that goes significantly beyond a basic anti-poverty standard, but instead is one that provides a significant level of retirement income replacement. There really is nothing comparable to this in Japan and the United States, where employers’ and employees’ negotiations over retirement benefits is seen as only occupying the private sector, largely free of the regulatory authority of the federal government and certainly not coerced by it. More basically, however, the relatively low level of unionization of each of these two liberal countries means that unless employees are in market demand, they are in a poor position to negotiate for higher levels of pension benefit.  

CONCLUSIONS REGARDING FUNDING STRUCTURES

When we look at the mandatory pension systems of these four countries, we note a consistency of commitment of both employers and employees for funding of the basic benefits, and this seems to be a just and fair shouldering of the burden and commitment. It is partly because this level of commitment phases out above the level of basic benefits paid by the state pension programs in the United States and Japan, that

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25 Unionization density rates in the United States are below 12%, and in Japan, below 19%. Sweden has a union density rate of 68%. For reasons explained earlier, France’s union density rate of less than 8% belies its unions’ influence over national retirement policy and the existence of occupational pension plans that cover most employees. (OECD, 2011).
those two countries’ societies seem to morally fail in their responsibilities toward their elderly at least when viewed from the perspective of the more general standards of many of the advanced industrial countries.

Keeping people above the level of poverty in retirement is only the first expression of the modern social obligation toward the elderly, it seems, though the United States’ Social Security system (or Japan’s, for that matter) does not even guarantee that, as we saw in figure 1 at the beginning of the chapter (using a relative definition of poverty). The second objective is to help retirees achieve a standard of living in retirement that is not significantly less than the one they enjoyed during their working lives. This bears closer examination.

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**Funding Objectives: Fairness and National Commitment to Old-Age Security**

As we stated in the Introduction to this chapter, another way to measure fairness is from the perspective of a social conscientiousness that supports a level of contribution to national pension programs that is sufficient. If the contribution is ‘enough’ to support high replacement rates, it proves a certain depth of obligation of the national society toward the elderly and retired. Please refer to Figures 9 and 10.

If the total of employer and employee contributions as a percent of salary can be seen as one level of a national commitment to retirement income adequacy, perhaps another
one is pension contributions as a percent of GDP. For it is ultimately the state that can decide on the level of the employer and employee commitments to retirement income security, at least for its public and mandatory private system. And where, in a democracy, there are low contribution rates and low performance in terms of high poverty rates and low coverage rates or net income replacement rates for retired workers, as there is in Japan and the United States, it may be fair to say that there is a low commitment from the national government, representing the national society or citizenry, to elder citizen financial security.

Clearly, the United States employer contribution rates are quite low when compared to its peers in the OECD, and both its employee and employer contribution rates to the Social Security system are among the very lowest of the 34 nations. On these metrics, the United States and Japan come up short of the OECD averages, and could be said to have failed in their responsibility to support their elderly population adequately.

**Dependency Ratios of Japan vs the United States and of the Other Countries**

But let us expand a bit a notion of moral failure to countries that exhibit poor performance on our criteria to take into account their differences, too. It might be unfair to lump the United States and Japan too much together, as they face such different challenges.
One of the most important metrics used to gauge the extent of burden that the elderly place on the national society is the dependency ratio. It is variously defined, but generally indicates the relative proportion of the elderly in a society, or the relative proportion of elderly retired workers to younger workers still in the labor force. For purposes of the next illustrations, the dependency ratio is the ratio of people age 65 and above to people between the ages of 20 and 64. The old age dependency ratio is the relative weight that each nonworking elderly person places on each working person.

The dependency ratio is a good way to cut through all the intermediate levels of taxation and funding and get to the barebones of a national pension system’s ultimate resources, since a lot of the basic public systems are financed on the basis of PAYGO funding arrangements, meaning ‘paying contributions as you go’, in which retired workers’ retirement income comes from more or less simultaneous contributions from current employees.

Even if some of the income comes from other sources, such as through general revenues (which are mostly paid by current workers earning compensation), the dependency ratio indicates whether there is a good balance of current employees to support current retirees, or whether there is a mismatch. If the dependency ratio is low, such as in the United States (currently 17.6%, and expected to rise to almost 29% in 2050)), then there are about 4 persons supporting each retiree. In Japan, the old age dependency ratio is almost 33% (expected to double by 2050), so there are only two people supporting each retiree. In any race to improve their national pension systems, Japan’s increasing
elderly population as a proportion of its citizenry produces headwinds that the United States will never come close to experiencing.

There is considerable correlation between the rate of total pension contributions as a percentage of earnings and the dependency ratio, and there is also considerable correlation between the percentage of taxes paid on the public programs of retirement income and the dependency ratio, as Figures 12 and 13 describe. The ways in which each nation handles these differences in elderly burdens is likely to reflect not just differences in their welfare state typologies, then, but also the extent of their relative elderly income burdens and the means they have developed to pay for them, either within or outside of their historical institutions and welfare state typologies.

In fact, the United States faces the lowest dependency ratio of any OECD country, both in 2010 and projected to 2050 (17.6% currently and expected to be 28.9% in 2050 (Pallares-Miralles, Romero, & Whitehouse, 2012, p. 110). Next to the old age dependency ratio of Japan, 32.9%, the United States’ dependency ratio suggests it is well-positioned to provide more support if necessary. Its contribution rate as a percent of total taxes is 4.6% and the percent of total taxes spent on retirement income security was only 16.3%, while those figures for Japan are 5.8% and 20.4%. (These numbers are based only on the public, mandatory systems of each country). See Figure 14. The point is simply that different countries face different levels of challenge in solving their elderly security issues, and this is one way of measuring those differences.
Therefore, perhaps there is more blame if the United States doesn't manage to produce retirement income security very well, that is, with higher replacement rates and higher contribution commitments. And on the other hand, perhaps there is less blame if Japan does not seem to do so well in providing a higher level of retirement income, given its sky high dependency ratio and high contribution level as a percentage of total taxes. See Figure 14.\textsuperscript{26}

The issue of fairness has to take into account the difficulties each nation has not only with its system of retirement income security, but the difficulties it faces in dealing with the size of the elderly and retired population itself. In this regard, it needs to be acknowledged that some countries, such as Japan, have especially difficult challenges that need to be taken into consideration. Other countries such as the United States, on the other hand, represent relatively easy burdens due to a smaller proportion of the elderly in their population. Failing to deal adequately with their more limited problems is perhaps less excusable in these less burdened countries.

\textsuperscript{26} Sweden has a relatively high dependency ratio, but its contributions to its public system do not seem significantly different from averages of the 13 OECD countries that were included in the Figure 12 analysis. There was no data available for France.
FIGURES 12 AND 13: PEARSON CORRELATION COEFFICIENT FOR DEPENDENCY RATIO AND CONTRIBUTION RATE AND DEPENDENCY RATIO AND CONTRIBUTION RATE AS PERCENT OF TOTAL TAXES.

BASED ON DATA FROM PENSIONS AT A GLANCE, P. 153 AND INTERNATIONAL PATTERNS OF PENSION PROVISION II, P. 110 (PALLARES-MIRALLES, ROMERO, & WHITEHOUSE, 2012). ONLY OECD COUNTRIES WITH ALL VARIABLE DATA INCLUDED

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</table>

**Funding Objectives: Mitigating Factors of Fairness and the National Commitment to Public Old Age Security Programs**

While admitting that determining the level of moral commitment of a society to its public system of old age security is a difficult task, due to the differences in difficulties related to such metrics as the old age dependency ratios and other metrics which we cannot detail here (employment, unemployment, and tax policies, for example), it may nevertheless be helpful to examine some trends that might help to explain to what extent some nations seem willing to go in order to provide income support to its elderly citizens. If some nations appear to be more generous or willing to take up the burden, and others less so, this may be indicative of a tradition, culture or history of choices that may need to be respected in any proposals for reforms, which is an important objective for us in the final Chapter.

However, this tradition or set of choices may also reflect the existence of ‘slack’ in a welfare state that scores low in the retirement income security metrics, both from a fairness point of view and from an ability to improve (if it wants to) point of view. A state that scores low in retirement income provision but high in social expenditures may have chosen to spend its money on other welfare benefits either out of greater need in those areas or simple preference for those other types of welfare benefits. But a state that scores low in retirement income provision but low also in social expenditures in general may have not only a moral impediment to a good conscience which its society may wish to correct, but a beckoning opportunity for improvement in retirement income security.
In a word, if a country wants to improve retirement income insecurity but isn’t doing much about it at the moment, and it hasn’t as of the current date increased social expenditures as far as they could be without harming other things it holds dear (such as very low tax rates or the existence of other social expenditures it considers more important), then it can increase social expenditures on retirement income programs much more easily that a country that is already spending a lot on social expenditures in general, and on retirement income benefits, in particular. Let us examine how our four countries line up based on metrics that measure the general level of social expenditures and those which particularly relate to pension provisions, and then generalize the results.

Figure 15: Based on Data from the OECD Social Indicators Data Base, OECD (2011), Society at a Glance
Figure 15 provides two tendencies, albeit with several exceptions, that seem to be guiding principles for elderly welfare programs and their relationship to overall national public social expenditure, at least for the OECD: As nations spend a greater proportion of their GDP on social expenditures (moving to the right of the top line in the graph), social expenditure spent on elderly welfare also increases (moving to the right of the bottom line in the graph). However, that elderly welfare component of social expenditure rises more slowly than the total social expenditure as we compare the two lines while reading from left to right.

This illustration suggests a trend that should not be overstated, but that might still be useful for purposes of conceptualizing possible reforms that could cost the state more money. Retirement income support programs are most likely to be proportionately larger in states that spend more on welfare programs in general than those that do not. Japan and the United States both occupy places that are below the mean social expenditure level (as a percent of GDP) and also tend to be in the lower half of the OECD nations’ spending on public retirement programs. Sweden and France are at the very top of both. Welfare state typology is thereby again affirmed as having placed these two countries under the right, ‘liberal’ label, but from a moral perspective, it would seem the United States and Japan also have more ‘room’ to spend on elderly financial security than Sweden and France, who are much more likely to be seen as ‘tapped out’ on social and retirement income security spending, since their level of spending represents a so much higher proportion of their nations’ total wealth.
Figure 16 tells somewhat the same story when total social expenditure is expressed as a per head figure, equivalized by expressing the figures in a ‘common’ unit of purchasing power parity (roughly, a unit represents what it would cost to buy the same basket of goods in different countries, in US currency). The illustration is merely an attempt to ‘test’ whether the conclusions we can draw from Figure 15 hold up when we can use a little more sophisticated method of comparison.

Figure 16 orders the countries in exactly the same order as in Figure 15, but now those same countries’ social expenditures are expressed in terms of purchasing power parity, as opposed to Figure 15, where they are expressed simply in terms of government social expenditures as a percentage of GDP.)
Moving to the right in Figure 16 represents an increase of the level of social expenditure. By and large, the ordering of this ‘derivative’ of social expenditures is not exactly the same as, but is still very similar to Figure 15. Sweden and France are still much higher in their social expenditures than Japan and the United States, as expressed as a proportion of their GDP. But Japan seems close to the OECD average, offsetting its ‘underspender’ status that we see more noticeably in Figure 15.

**Funding Objectives: FAIRNESS PART TWO: VOLUNTARY SYSTEMS**

Voluntary pension systems are available in our four countries under examination, as well as many others in the OECD. For the most part, whether a voluntary system of retirement savings is offered is up to the employer, although joint boards of trustees representing unionized employees and employers may also provide for them in the United States and elsewhere in the OECD. The availability of data for these voluntary systems is more limited than for the public and mandatory occupational systems.

The United States’ system of voluntary occupational program has a relatively poor state of coverage (less than 50% of workers even have access to a private plan) and disproportionate savings levels that correspond to the compensation distribution of employees. Finally, the fact that the system is subsidized by all taxpayers appears as a crowning fairness failure corresponding to some of the worst characterizations of a tax system – unequal burden-sharing, a narrow band of relatively well-off beneficiaries who have rights to huge tax expenditures, and a system that fails to sufficiently motivate lower-income employees to save anywhere near their needs for retirement income.
There is every reason to assume that at least some of these negatives carry over to other countries’ voluntary pension systems that we know less of. However, the accidents of occupation and career partly determine how well one is prepared for retirement in the United States and Japan, along with the individual ‘luck of the draw’ that determines the worker’s overall outlook on the future, his ability and willingness to plan for the far-off retirement age, his financial acumen, and other personal characteristics that are much less important in Sweden or France to one’s retirement income prospects because Sweden and France have public and occupational pension systems with nearly universal coverage and very significant contribution levels.

**Indeed, the reason that it is so important that Japan and the United States get their voluntary occupational pension systems ‘right’ is because their public mandatory systems do not supply enough income for the average worker to keep him from falling off the cliff when he reaches retirement age.**

Compare the net replacement rates, for example, between those countries that have mandatory private systems, and those that don’t. The sort of pressure on voluntary occupational systems faced by Japan and the United States is much greater than those that sport compulsory or mandatory occupational systems, such as France and Sweden, that already supply additional earnings-related income through their workplace retirement programs. In a word, Japan and the United States and any other country that
provides only voluntary occupational retirement programs as a way to ‘top off’ their basic state pension system so as to boost retirement income replacement rates up to over 80% or so of pre-retirement earnings, is leaving to chance the retirement income security of its individual citizens.

The United States’ choice to leave such an important outcome as retirement income sufficiency to the vagaries of an individual’s circumstances, character, and knowledge seems to be drawn from a misunderstanding of the concept of freedom and a misrepresentation of what rational choice truly demands of the choosing person: a realization of the risks of all choice alternatives and an ability to affect the outcome by his own thoughtful and patient actions. Neither of these basic requirements necessarily exists when an employee fails to be covered by a pension program, or fails to enroll, or fails to learn what is necessary to do a credible job of managing his retirement assets, or fails to follow through on his well-made plans to save consistently and adequately.

Offering a voluntary pension system as a substitute for a real opportunity for retirement income security in the midst of these facts seems to come close to being a moral sham which cannot be obfuscated by defenses for a certain type of freedom that is at least irrelevant and may even be seen as counterproductive to ensuring retirement income security for the majority of citizens.
In the end, considering the ‘unused capacity’ that the United States has in relieving old age insecurity, in terms of its relative standing on social welfare spending in general and retirement income spending in particular, its ‘dead last’ standing in terms of its old age dependency ratio which emphasizes its unique position among the OECD as having an exceedingly benign position in terms of the potential size of its ‘old age’ burdens, and its lackluster performance in terms of spotty coverage and inadequate replacement rates for the lower-income wage earners, it stands out as a nation with a lot of promise in terms of what it could do for improving retirement income security, but one which still has very much more to do. Japan is in a very difficult position to solve its old age problems, however, and so is much less apt to be able to perform as well as the United States if it does take further steps to ameliorate old age insecurity problems.

At any rate, the fairness prizes must go to France and Sweden, once again. They have generated better replacement rates and better coverage in spite of some challenges from a dependency ratio perspective (Sweden, in particular, has relatively high dependency rates). They seem more committed than Japan and the United States to providing a standard of living for their elderly that is closer to the standard of living they experienced during their working lives.
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<th>BENEFITS OBJECTIVES</th>
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| FUNDING OBJECTIVES |
|---------------------|--------|--------|-------|
| Moral Justifiability | X      | X      |       |

**FUNDING OBJECTIVES: BEHAVIORAL AND AFFILIATION OBJECTIVES**

We have already seen some of the potential moral or ‘value’ advantages of the employer and employee contribution ‘sharing’ that is a hallmark of our Social Security system but also some of the mandatory occupational systems, and there seems a good measure of intergenerational equity exhibited in the PAYGO systems which is the main source of funding for the public parts of the pension systems of the United States, France, Sweden, and Japan. Making funding the joint responsibility of both employers and employees and cross-generationally might be expected to have a beneficial effect on these parties’ sense of working together toward a social good. But though this may be a plausible view, there is no time in this essay to build an empirical case for it. Nonetheless, this notion of paying attention to the effect of a social program’s design in terms of contributing to ‘external’ positive social outcomes or similar positive affiliation effects amongst different social groups should remain a major consideration in the design of the best possible systems.
There are also behavioral objectives associated with the potential positive outcomes of a sufficient retirement income that is more dependable, such as the type of retirement income coming from Sweden and France and other systems that provide relatively higher replacement rates (Social Security income is fairly assured, but it is also not often enough, as we have previously covered). A worker in a country with a more certain and sufficient source of retirement income would be expected to behave with more freedom and abandon in the choice of his career, movements in the labor force during his career, and changes in the development of his career, if he did not need to concern himself with staying with an employer that covered him under a retirement benefits plan or which vested him in the retirement assets only after several years’ service. Perhaps this sense of security might be expected to generate more happiness or satisfaction for life. To show this relationship is more than just plausible, however, further empirical work will need to be performed.

In addition, a national pension system that provides nearly universal coverage with relatively high replacement rates to the average and low-income participant, and which tends to recognize old age security as a societal objective and thereby provides a sense of security to workers and retirees might be a system that supports social cohesion (or at least reduces frictions), or which generates confidence in government, but this must remain a question for future researchers, as well. Such a pension system may indeed nurture a sense of cooperation between workers and retirees, between the young and the old, between employers and employees, and between citizens and their government, but we cannot prove it at this point. (Please see Figures 17 and 18, below).
There are signs in Figure 17 that a satisfying life *might* be connected to a high level of retirement income security or larger welfare benefit expenditures more generally, and indications in Figure 18 that there *may* be an association between a government that is identified with high levels of retirement security (or possibly more broadly, higher levels of overall income security) and a high level of trust in government. But there is much too much work to do in this area to come out with anything definitive. We must therefore leave the scorecard blank on this particular criterion, for now.

![Life Satisfaction Index](image-url)

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| Totals                                  | 4      | 5      | 0     | 0  |
CONCLUSIONS REGARDING PERFORMANCE ON THE FUNDING OBJECTIVES

Let us now summarize and draw conclusions from our comparative analysis regarding funding with respect to these four countries and the OECD as a whole, with special emphasis on items of particular relevance to the United States.

1. The funding of the retirement income systems of the liberal states under discussion, Japan and the United States, suffers from its reliance on voluntary employer and employee contributions. This produces inequitable and inadequate funding which results in poor coverage and benefits levels for significant proportions of their workers.

2. National commitments to fund old age security programs are low in the case of the two liberal countries that were included in this review, which shy away from the realities of rapidly increasing retirement years and old age populations. A failure to recognize these realities and to rely on old age support systems that were designed to work with better-functioning private plans and/or voluntary savings programs has produced a quandary in how Japan and the United States should solve the inadequacies in their pension systems. Nonetheless, the mandatory occupational programs of Sweden and the compulsory occupational programs of France shed light on one possible avenue to develop which shows promise, and which in the United States could be depicted as being based on the same funding platform (employer and employee contributions) as its revered Social Security system. However, by not being able to rely on its voluntary
system of private plans to increase coverage of employees, the United States is in the difficult position of seeking new sources of funding that could increase its currently low income replacement rates without relying on mandated contributions or other compulsory sources.

3. Nations have different challenges in terms of their old age support burdens. The United States has among the lowest set of challenges, owing to its benign old age dependency ratio which is expected to continue to be the lowest among the OECD, and its relative status as being a modest – though fairly effective, in the case of its Social Security program - spender in terms of welfare state and particularly, elderly welfare state causes. In a word, the United States could be expected to be able to increase elderly financial security much more than it has, considering its fairly low rate of social spending as a percent of its whole economy and in terms of its social support to the elderly through special programs for them, in particular. See Figures 15. The Social Security system, as mighty as it is, cannot do the whole job, at least as currently designed, so other sources of funding will need to be found.

4. The United States’ liberal history of letting private markets solve problems has clearly not worked in the case of retirement income security, making it necessary for people of the United States to re-think these problems in non-ideological terms. By specifying the problem as a scientific one of a society facing a rapidly developing national crisis, with the goal of retirement security for all, and observing how other nations have been able to address the problem,
solutions are most likely to emerge. The comparisons made with other countries in this chapter indicate the United States lags in terms of the development of retirement income security systems that recognize the reality of longer-lived workers and the lack of universal retirement income systems that could ‘top off’ Social Security benefits. The holes in coverage evidenced by the private pension system forces the United States to be open to significant reforms in order to correct the underachievement of its voluntary private system and in order to enhance the possibilities for a more dependable form of retirement income.

5. France and Sweden’s more prominent history of employer/employee coordination does not necessarily mean that such coordination has not existed in the United States’ history and cannot therefore be called up in support of new funding arrangements. Similarly, the state’s (which is to say the society’s in a democratic country) potential influence in pushing for joint commitments from employees and employers should not be disparaged as impossible in a liberal state such as the United States.

Recent changes in national medical insurance programs and the historical sharing of funding for workmen’s compensation (as well as Social Security itself) are instances where employers and employees were seen as jointly responsible for solving social problems of common interest. This history can be used as a foundation from which to face anticipated challenges to improve retirement security by diminishing the insecurity of the voluntary system or by
creating significant enhancements to, or in addition to, the Social Security system.

CHAPTER CONCLUSIONS

SUMMARY OF THE COMPARISON OF NATIONAL PROGRAMS OF RETIREMENT SUPPORT: WHAT'S NOT WORKING FOR THE UNITED STATES?

We have discussed the peculiarities of each representative national pension system of Sweden, France, Japan and the United States and found that the Japanese and United States’ national pension systems, taking into account their rating on the six funding and benefits objectives, to be inferior.

We have tried to read the explanation of that failure from the unique histories of each of these two countries, which is partially explained by their ‘liberal’ welfare state tendencies, and by their differences with Sweden’s and France’s more generously funded public and mandatory private pension systems. These differences include, for example, Japan’s and the United States’ reluctance to use funding methods such as higher levels of employer contributions (through mandatory or compulsory occupational pension plans) and/or employee contributions or other sources that make Sweden’s and France’s systems produce much higher levels of replacement rates that are much more universally shared than are Japan’s and the United States’ combinations of social security ‘state’ plan benefits and voluntary private pension system benefits.
While the United States’ system of Social Security is progressive and secure, it supplies insufficient retirement income to those who have no other significant source of income. It was designed to only provide a basic benefit to which would be added employer and individual funding. Sadly, these latter two sources are not very secure and depend upon voluntary actions (on the part of employers and employees) that are often overlooked or assigned lesser priority than they deserve. As a result, for many workers and retirees, the only secure retirement funding they have is Social Security, and that source is not designed to bear the total cost of adequate retirement income. Nor will it be able to carry that burden in the future, at least without some significant changes.

Our historic summaries also indicated the continued presence in both the Swedish and French societies of labor organizations whose concerns for income continuation into retirement were represented in national legislation and in their particular cases, the evolution of occupational plans that required significant employer contributions. We also noted that the poor unionization rates or worker ‘voice’ in the United States and Japan may have contributed, along with a traditional reluctance on the part of liberal governments to expand social welfare programs, to a failure to address the problems of elderly insecurity in an age when senior citizens’ life expectancies are expanding. At the same time, help from either governmental or private programs is, at least, not increasing and is perhaps even more diminished and more tentative than it was 30 years ago, owing to the decay of the private defined benefit plan system.
We have also pointed out that the employer seems to be missing in the United States as a dependable contributor to retirement security outside of Social Security, and especially in low-paid occupations and industries, and have provided hard evidence that the employees’ ‘freedom’ to ignore partial funding responsibility seems much too cavalier of an approach for a secure and fair national system to rely on. These are characteristics of the current voluntary private system. And they are also characteristics of a liberal state that allows businesses and employees the freedom to choose whether or not to plan and fund retirement incomes for employees.

In addition, unlike the tradition there may have been in France and Sweden, in Japan and the United States there is no expectation that the social partners (employers and employees) might come to a conclusion and agree to solve the retirement income problem once and for all, albeit with nudging from state actors such as legislators. And the voluntary private system of the United States shows no signs of expansion. Only half of private sector workers are covered, the same proportion as the last 30 years. (Munnell A. H., 2012, p. 3). Yet there is very little savings outside of private pension plans, either.

Finding a secure source of income to augment Social Security is one way to look at the problem. The rest of the retirement income security system, consisting mainly of voluntary private plans, is simply not working very well for too many employees and retirees.
In the last chapter we will try to establish a final summary of these weaknesses of the United States system and then try to evaluate to what extent we may be able to either design or import some promising solutions.
# Chapter 4: Recommendations for the Reform of the United States Pension System

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CHAPTER 4: RECOMMENDATIONS FOR THE REFORM OF THE UNITED STATES PENSION SYSTEM

INTRODUCTION

We now come to the point at which we will attempt to provide some possible solutions for ameliorating the difficulties of the United States retirement income security system, more informed about its particular drawbacks and more acquainted with the ways in which other nations have sometimes more successfully approached similar challenges.

We will start with a recap of some of the greatest weaknesses of the United States system, move to outlining some of the strengths we saw in some of the other national systems, and then try to develop what initially seem to be some of the more promising policies and practices that we might want to consider promoting as recommendations for reform.

THE WEAKNESSES OF THE UNITED STATES’ CURRENT RETIREMENT INCOME SECURITY SYSTEM

INTRODUCTION

In the last two chapters, we noticed several weaknesses in the United States system of retirement income security that made it difficult for it to provide sufficient retirement income to a significant subpopulation of the elderly. Let us list these weaknesses one by one.
For this purpose, we have dropped the ‘Fairness’ and ‘Behavioral and Affiliation’ objectives from the original list of comparisons in the third chapter in order to focus more on benefits. In addition, the categorizations will be tuned more toward the perspective needed to advise the United States, in particular, on how to improve the benefits structure.

While these categorizations are based on the ‘Benefits Objectives’ of the third chapter, we here combine ‘Progessivity/Regressivity’ with ‘Coverage’ and create two new categories that are helpful for understanding the crucial importance of the voluntary occupational system in the United States and another one that focuses on inadequate savings outcomes, which are arguably more of a problem for a nation that relies on a voluntary private occupational system than one that has a mandatory occupational system in place.

1. **Poverty Reduction**

   Amongst the countries of the OECD, using a relativistic measure of poverty of one-half the median income, the United States does very poorly in comparison with the other advanced industrial countries. The poverty rate for people over the age of 65 is 22.4%. The number of people over age 65 who are living in poverty in the United States, therefore, is about 2/3 more as a proportion of the total population over 65 than the average of the OECD countries. The elderly poverty rate for the United States is more than 3 times higher than Sweden’s and more than twice as high as France, as pointed out in the last chapter.
2. Level of Retirement Benefits, or Replacement Rates

Amongst the countries of the OECD, the average replacement rate for a person earning average wages is projected to be well over 60% under current legislation, while in the United States it is less than 45%.

3. Coverage (Including Access to Occupational Pension Plans) and Progressivity

In the United States, the Social Security System provides universal benefits that are calibrated to provide a higher level of benefit for lower wage earners, as a percentage of pre-retirement wage income. However, because this benefit is so much less than is needed to provide a decent size replacement rate, which is recommended to be at the 80% or higher level as a contemporary rough standard, the ultimate retirement benefits’ progressivity level is much less than suggested by the Social Security’s progressivity level.

When this income is taken into account, it becomes obvious that the combination of Social Security and voluntary private pension income creates a very uneven level of benefit. Those employees who have not been able to participate in workplace retirement programs, or who have had trouble saving and investing in a retirement plan arrangement, are left with very little income besides Social Security. Those in better, higher-paying jobs, on the other hand, have a better chance of being covered under a retirement plan, have a better chance of saving more, and are able to manage (or seek advice to help manage) their investments.
and retirement planning. Higher-income employees have much better retirement income outcomes as a result.

4. Reliance on the Voluntary Occupational Plan Performance

Finally, some of the weaknesses of the United States can be chalked up to the reliance (and some would say, over-reliance) it has had on a voluntary system of private plans, and the relatively poor experience it has had with them from the point of view of the coverage and replacement rate problems listed above.

What are the weak components of this system? That it depends upon the availability of a workplace retirement plan to begin with, that it requires the ability for an employee to marshal the discipline and cash to contribute to it, that it requires the people covered by it to possess the knowledge and financial literacy to be able to properly invest it (or at least to obtain objective investment and retirement planning advice), and that it requires the people who are covered by it to exercise the discipline to not tap into it until retirement. This system also depends upon workers having enough ‘left over’ every week to be able to put something ‘away’. If something in this line of conditions is missing, retirement income is likely to be insufficient because it will depend almost entirely on Social Security benefits, which average less than 50% of pre-retirement income.
5. Inability to Save and Invest Profitably

Though the inability to save is a weakness of the voluntary occupational plans in general and needs to be considered as part of the discussions on the last bullet concerning voluntary private plans, the failure to amass wealth through saving and investing not only damages retirement savings balances, which are important sources of retirement income, but also minimizes any type of wealth – bank savings, mutual funds, brokerage, and housing – that could be used to partially fund retirement income. We saw the results in the relatively low level of savings, liquid assets and net worth exhibited in the second chapter. Retirement savings balances and other types of liquid assets are an important source of income, and lower-income retirees are notable for the paucity of their savings balances.

Many Americans do not save enough to significantly bolster their income in retirement. Half of the population at age 65 have retirement savings balances of less than $100,000, and these balances are halved by age 75, according to the 2010 Survey of Consumer Finances. The median net worth is only $200,000 at age 65. That means that half the ‘early’ elderly population has assets (taking into account debt) of less than $200,000, including their houses, cars, and liquid assets.

Let us now look more particularly at the strengths of, mainly, the French and Swedish systems along the same lines in order to focus on the possible reasons that those systems seem to be doing significantly better.
THE STRENGTHS OF THE FRENCH AND SWEDISH RETIREMENT INCOME SECURITY SYSTEMS

INTRODUCTION

Let us look at these standards from the point of view of the successes of the French and Swedish systems.

How is it that France and Sweden ended up ahead on most of these factors? In the end, it is due to vast, but somewhat similar differences in system design that has led both European nations on a fairly successful path, which is well worth mulling over before coming to any final recommendations for improving the United States’ system.

1. Poverty

France has a minimum pension that provides over 20% of average earnings for those 65 and over (for people who work less than 41.5 years, the amount is prorated down), and Sweden has a ‘top-up’ of 24% of gross average earnings, meaning there is a means test after all pension income is accounted for, and if one’s total pension income does not take one past 24%, the ‘top up’, minus the amount of income received from other sources, is paid. (OECD, 2013, pp. 252, 344).
The Social Security system has no such guaranteed minimums. For someone who has not worked very much or who has a spotty wage record, and who was not married to someone with a steadier or higher wage record, the earnings from Social Security could very well be less than these two countries’.

Nonetheless, laxness in the design of Social Security is not the origin of the real problem we see when we compare the poverty rates of these three countries, as we did in the last section, with the United States having a poverty rate, 22.4%, for those over age 65 that was 2 and 3 times that of France and Sweden, respectively.

Poverty is usually not exclusively handled in old age security programs, though it should be an objective of any national retirement income security system to resolve. It may be fought by separate national anti-poverty programs, in-kind benefits programs, other transfer payment or welfare programs, and even employment programs. The United States has a means-tested program known as Supplemental Security Income that provides a benefit of 18% and 26% of average earnings, or $721 for one person or $1082 a month for a couple, but it has strict asset tests. Anything over $2,000 worth of assets for a single person (subject to a few exclusions) could exclude that person from receiving anything from the program. (OECD, 2013, pp. 362-363), (Social Security Administration, 2014, p. 1).
For our purposes now, it is mainly important to note that France and Sweden for some reason chose to ‘live with’ a level of poverty for their elderly that is much lower than the United States. How they determined to keep this level down is a matter that would necessitate our having to examine those two countries’ total welfare benefits structure, which is beyond the scope of this work. Nonetheless, this is still a problem we can try to address in the final recommendations in the next section that concentrates on the United States. Solving the problem of old age poverty is something left undone in the current retirement security system of the United States and needs to be addressed.

2. Level of Retirement Benefits, or Replacement Rates

We saw in the last chapter than Sweden and France had significantly higher net replacement rates than the United States. Both France and Sweden have occupational plans that are required to be offered to the vast majority of their full-time employees. We saw that on average, countries of the OECD that have higher replacement rates have mandatory occupational plans. The United States has only a voluntary system of occupational plans. The United States tries to get by with a smaller set of mandatory benefits than these two nations and the meager results in income benefits should not have been unexpected.

In addition, both Sweden and France have higher employee and employer contribution rates to their mandatory plans (including both their public and occupational plans) as a percent of compensation and as a percent of GDP than
the United States. In fact, the United States contribution rates are below even those of Japan. Again, we saw this in the last chapter.

Better funding means higher replacement rates. But substantially higher replacement rates for the United States system could only result from higher contributions to the voluntary private pension system, but as we saw in Chapter 2, this source of income is related to mainly higher-income households only because they are the only ones who make (or in some cases receive from their employers) significant contributions. Therefore, those in the lower income brackets generally must rely solely on Social Security for their income, which is geared toward a 45% or 50% replacement rate. The higher income brackets, because they receive private pension income as well as investment income, are often able to achieve higher income replacement rates, because they are not so reliant on Social Security income and receive their retirement income from multiple sources.

3. Coverage (Including Access to Occupational Pension Plans) and Progressivity

Perhaps the most crucial determination of the progressivity of the pension benefit is the fact that in the United States, a significant amount of the benefit depends upon the ability to be covered under and earn benefits from a voluntary private pension plan. Workers in France or Sweden don’t have to worry about that. They
are covered, their contributions and their employers’ contributions are
mandated, and their benefits can be substantial, as we saw in the last chapter.

On the other hand, benefits paid to workers in the United States that do not have
access to a private plan or who do not save very much may reflect the progressive
benefits structure of the Social Security system, but the fact that they often do not
receive much in the way of private pension benefits makes the whole system fairly
regressive, as we also observed above and in the last chapter.

Access to private pension plans is necessary in order to save, but access is not
available to all. In addition, sufficient assets have to be saved during the working
years or the ultimate benefit received will be far from adequately replacing one’s
pre-retirement income. Again, the savings rate and wealth created by lower-
income workers is too low to make much of a difference in their retirement
income stream. The private system works mainly for those in higher-paid jobs
who tend to be covered by a retirement plan and who can make a significant level
of contributions.

4. Reliance on the Voluntary System’s Performance

Sweden and France have some measure of additional occupational plans that are
voluntary, but when you observe the fact that their mandatory occupational plans
are practically universal, and that they offer higher levels of replacement rates
than the United States Social Security system between their public and mandatory occupational plan system, it seems to be somewhat of an unfair fight to compare the performance of the United States’ voluntary system to Sweden and France’s mandatory systems.

It is unfortunate to have to keep repeating the same facts, but the US voluntary system works for those who are covered under a retirement plan at work, are able to save and invest wisely, and if they are lucky, it works especially well for those who can expect to enjoy continuous and generous contributions from their employers. If any of these things is missing, the voluntary system does not work very well.

The Swedish and French systems do not rely on any of that. They consistently take contributions from employees and employers and pay them out (or invest them for future benefits). Their mandatory occupational systems are as certain a source of retirement income as our Social Security system, but provide a higher level of benefit. It’s really as simple as that.

5. Inability to Save Sufficiently, Invest Profitably, or Plan Appropriately

Without further research into the French and Swedish savings habits, there is no way of determining whether their penchant for saving is any higher than the United States. This fact is really not relevant. What is important in the French
and Swedish pension systems is that they do not rely on personal saving or decisions that must be made by employers and employees to increase their level of saving and wealth. Contribution levels are fixed and the burden is shouldered by employees and employers under law.

On the investment side, the French and Swedish systems are also not dependent upon individual investment accounts and individual investment performance the way that the United States’ voluntary retirement plans are. Sweden provides individual investment accounts for only 2.5% of total contributions. France has no individual accounts in its public and mandatory programs that depend upon individual investors to be good at what they do. Workers do not have to rely on their own investment prowess.

This is not to laud the fact that the French and Swedish systems do not harness the potential power of investment and interest compounding that is available to so-called pre-funded systems, such as the voluntary defined contribution plan system of the United States. That ability to experience gains is foregone by these two European systems, though their income flows are also less subject to fluctuations related to investment market rises and falls. The point, instead, is that the French and Swedish systems do not require that each participant become adept either at investing or in choosing an investment advisor in order to maximize their retirement income (though it might still be important in the Swedish system since individual accounts are a part of that system).
Finally, the relatively higher replacement rates of the Swedish and French systems do not even absolutely require that workers plan their retirement in order to match their objectives with behavior that will ensure the achievement of those objectives. They are ‘automatic’ systems to a great degree. This is not to claim that no worker is better off if they look ahead and plan for his or her retirement under either the French or Swedish systems. But it seems fair to claim that a much closer-to-adequate retirement income stream is more likely to be the result of the French or Swedish retirement income security system than the United States system for anyone who lacks the income, ability or discipline to save, the knowledge to prudently invest, and the wisdom (or good fortune) to keep him from accessing their retirement funds until the start of retirement.

Low-paid, impatient, undisciplined, less financially literate, or misinformed people can still do well under the French or Swedish systems. Their systems’ success does not depend upon having a high level of engagement from informed, prudent and well-advised individuals with discretionary income. The United States private pension system absolutely requires these qualities, and more.
POLICIES THAT COULD POSSIBLY IMPROVE THE UNITED STATES RETIREMENT INCOME SECURITY SYSTEM

INTRODUCTION

We have made some comparisons between the United States’ retirement income security system and those of three other countries. While the system of the United States has come up short on some of the criteria, the evidence suggests that there is a real possibility to improve the performance of the United States based on some of the success of France and Sweden. For example, France’s and Sweden’s better job of reducing poverty and supplying a higher level of retirement income, as a percentage of pre-retirement income, might mean the United States should look at wringing a bigger contribution to workers’ retirement security from the expansion of occupational plans, perhaps combined with strategies to increase contribution levels from both employers and employees, for example.

Or perhaps the United States should consider arming employees with a better sense of the importance of early and disciplined savings and investment programs with a better ability to succeed in those programs. This might include a means to help employees at the lower end of the wage scale to make significant contributions without interfering too much in their ability to maintain a decent current lifestyle, meaning without interfering significantly in their ability to provide for their families’ basic needs for food, shelter, clothing, health and each member’s ability to fully participate as citizens and members.
of the broader society. People who have barely enough income to ‘get by’ aren’t going to be people who save very much.

The United States may either try to improve and reform its current systems or try to come up with new ways of boosting retirement income. Here is a sampling of possible partial solutions intended to improve retirement security in the United States.

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**REDUCING POVERTY**

In terms of poverty reduction, the entire United States social welfare system is called into question for its poor performance based on the OECD poverty measure, since a social welfare system is charged with the objective of reducing poverty as a primary goal. The Social Security system still relies on a relatively long period of service at significant wages in order to generate an income that is adequate, and for people earning half of the average wage who were not married to someone who served a full career at significant wages, generates at most a 55% replacement rate on average. In addition, poverty isn’t just a problem for working people who are retired (with a poverty rate of nearly 20%). The poverty rate for those of all ages is also high in the United States under the OECD definition, at close to 15%.(see Figures 1 and 2 of Chapter 3).

Poverty reduction is an objective of old age security programs that may need to be addressed outside of the Social Security retirement program itself, and is a broader
problem than just the one focused on retirement income security. As briefly described above, the Supplemental Security Income program is sometimes viewed as the ‘anti-poverty’ program of Social Security, but it only generates less than 20% of average earnings, and practically requires the liquidation of most assets other than a house and car. These money benefits are of course reduced for any income received. Food stamps are generally also provided for people in dire circumstances, and Medicaid may help with medical bills.

In the end, the only way to eliminate elderly poverty, whether it is a program targeted just to the elderly or to indigent Americans generally, is to set a standard level of consumption (which can be approximated by income) that the state promises to maintain through a combination of cash and in-kind programs. Such program would have to be means-tested in order to ensure this income or in-kind benefit support were provided to people who were truly deficient in income and had no sizeable amount of assets (although the maximum amount of assets under SSI seems too low, inasmuch as it forces the spend-down of assets to a dangerously low level that would make it impossible for an individual to handle any kind of a financial emergency). But having such high rates of poverty that the United States does across the entire age spectrum suggests this is probably a problem that should be addressed across the age spectrum rather than in a separate elderly program.

Of course, the present official poverty definition is a further hurdle that gets in the way of reducing poverty as defined in the OECD definition. The OECD type of relativistic
definition would need to be accepted by the United States government before any headway could be made to actually bring poverty program standards up to that level.

INCREASING ACCESS TO PRIVATE PENSION PLANS (COVERAGE), RETIREMENT BENEFITS, AND RETIREMENT PLANNING

These remaining problems are so inter-related that it is difficult to separate them into individual problems with potential individuated solutions. Instead, let us look at some potential design changes in the retirement income security system suggested by those of some of the OECD countries and then speculate whether they might be successfully adapted to significantly reduce these problems for the United States. We need to focus on design principles that help to ameliorate one or more of these problems, but without causing worse problems for some other crucial aspect of our current, or reformed, retirement income security system.

With so many company retirement plans now depending upon employee contributions to provide a significant savings balance to partially fund retirement income, the failure of many employees to amass significant balances by normal retirement age causes us to seriously consider what the voluntary private pension system really requires in order to work. It requires a lot.
The private retirement savings programs that currently cover only about half of employees at any point in time rely upon individuals making rational choices that maximize individual benefits, to work, as explained above. The success of the voluntary private plan programs relies on the existence of thoughtful, knowledgeable and patient actors (employees), who don’t lose sight of their needs in the future when making present decisions. These actors must be disciplined enough to start saving early in their working careers and to increase saving as, and if, their income improves. They also must be astute enough to perform the rough calculations to determine how much they need to save in order to sufficiently augment Social Security benefits to replace a good portion of their pre-retirement income. They must have enough financial acumen to invest their accounts wisely, or, at least, to choose carefully and knowledgeably their investment or financial advisors.

This description seems to match the type of actor that 401(k) and 403(b) and similar plans were designed for and depend upon – disciplined, rational, and financially literate employees, but experience indicates that this is not always the type of employee they cover. Unfortunately, many workers do not have an abundance of these qualities, and so they fail to do those things that would lead to a higher retirement savings balance. We have seen that many people do not save much at all.

What can be done if the employees are not designed to work well with the current retirement plan design? There are obviously two things that can be done. The first is to re-design the retirement plan so that it works better for actual employees with all their
limitations. The second is to ‘redesign’ employees so that they evidence and practice those attributes that the private pension depends upon to make those decisions and take those actions that will ensure that employees are ‘flush’ with funds at retirement.

Let us suggest ways to redesign the retirement plan, first, and then discuss how actual workers might benefit from improved incentives and learning experiences that could help them become more adept at behaving as fully engaged, informed, and prepared individuals seeking the best possible outcomes for their own retirement income security.

REDESIGNING RETIREMENT PLANS: SOLVING THE COVERAGE PROBLEM

INTRODUCTION

We have discussed the fact that many small employers and some larger employers do not establish retirement plans and that about half of workers are not covered by a retirement plan at any point in time. It’s been like that for over 30 years, and no reason for thinking that it’s about to change. This voluntary private system also leads to high replacement rates for people covered and contributing to a plan (high-income people), and low replacement rates for those who don’t (low income people), so this problem is related to the problem of a regressive outcome in terms of benefits structure, as we pointed out in the third chapter.
There are only so many alternatives that can be predicted to significantly change the landscape of retirement plan coverage, and they are not all likely to be the easy ‘nudge’ type of reforms that have already been tried. Tax deductions, credits, or a description of all the benefits to employees of private pension programs has not guaranteed private pension plan presence in all firms, not by a long shot. Let us present a sample listing of more realistic possibilities that could improve coverage.

## MANDATORY PLANS: COULD THEY EVOLVE FROM THE MYRA?

While mandatory plan provision has been among the stock legislative proposals to increase plan coverage for many years, at least one step in the right direction has been taken by the President’s administration, which is rolling out the myRA at the end of 2014. While there is no requirement for employers to offer this plan, it is designed to overcome employer concerns about the cost and complexity of offering retirement plans.

The myRA will only require employers who sign up for them to collect payroll contributions and submit them to a financial services provider for deposit into an ‘IRA’-like account. The sign-up process will take place on-line. Contributions will be limited to after-tax Roth contributions. Investment funds will be provided by Treasury, and they would be guaranteed against losses (though they will also probably not earn very much). There will be no fees for opening and servicing the account.
But while short of a mandatory plan, it is not difficult to see how myRA might someday evolve into a mandatory plan if it becomes popular. If it were to expand to cover most of the employees not currently covered by private plans, and if employees who transferred to other companies that did not offer it indicated how important it was to them (perhaps even making decisions as to where they work dependent upon having a retirement plan or myRA available to them), this expansion to mandatory status might not seem like quite the step it seems now, where such an expansion would affect many more businesses and employees who do not offer retirement plans or who are not covered by them.

It is possible that we will look back one day at this initiation and find it was the beginning of the ending of the retirement plan coverage problem. Our final recommendations to possibly build on this proposal will be made in a moment.

‘COMBINED EMPLOYER’ PLANS: WHAT’S THE HARM?

It is currently against the law for two or more companies that are not related through joint ownership or which are not part of a bona fide organization that affiliates them to establish a joint plan (with an exception for union plans). These types of plans, called multiple employer plans (“MEPs”), have been around for some time, but the Department of Labor (DOL) recently clarified that without some sort of organizational affiliation or cross-ownership, employers who opened or participated in such a plan were actually creating a different plan for each employer. (Department of Labor, 2012).
The type of multiple employer plans that are being called into question are those that share no common ownership amongst the firms sponsoring them, but which also do not fit the DOL’s (recent) interpretation of being a part of a bona fide employer group or association. In some cases, in fact, employers have joined existing MEPs to simply save money on auditing and filing costs, legal bills, and recordkeeping fees, which were actually the reason for their ‘affiliation’. Under the clarified interpretation of the DOL, however, there is no ‘bona fide’ affiliation if the only reason for the employers to join together were to establish one plan. Therefore, each employer really has a separate plan and each employer is at separate legal risk for not filing separate reporting forms and otherwise treating their plan as separate from the others in the ‘MEP’. These types of MEPs can only be treated as ‘one’ plan if the employers have a formal, combined organization that controls the operation and administration of the plan, and many of them do not. (Dempsey, 2012).

Yet allowing small businesses to coordinate administration within one plan for one service provider would practically guarantee lower prices and more value-added services to small employers. There could be one annual audit for one price and one annual filing for all the employers, instead of one for each employer at multiples of the cost. With lower costs and administration headaches, it is probable that more employers would establish retirement plans for their employees and costs might continue to go down.
The type of cost-reduction and joint responsibility combined employer plans could lead to would seem to counterbalance the concern for the loss of accountability that an employer is supposed to exhibit toward the plan, which is a fear that is sometimes brought up in the context of ‘multiple employer plans’ of this type. (American Bar Association, 2013).

Yet surely accountability could be handled the same way it is now – through lawful assignment of responsibility under ERISA, which has been amended numerous times in the last 40 years. ERISA manages to delegate responsibilities continuously to the employer no matter how involved other entities – such as investment advisors, recordkeepers, and other service providers – participate in the day-to-day aspects of the plan. Each employer can be equally responsible for indemnifying participants against wrongful losses, self-interested transactions, or for ignoring undue influence over the plan exerted by associated service providers, just as they can individually do that now. Legislative updates to ERISA could be made if anything clearer needed to be updated in the law.

Just as importantly, by combining their purchasing power, employers are more likely to obtain the legal, accounting, training, and financial literacy and investment education services that many might want to offer their employees but which they cannot currently afford. Service providers currently provide different levels of services depending upon how much they get paid and the importance of their client’s potential business to their own margins. If these service providers were approached by a larger, combined plan
representing efficiencies of scale and the negotiating power to drive a harder bargain, service providers will be more likely to make sure that ‘open’ multiple employer plans receive better services at lower cost.

CONCLUSION AND RECOMMENDATIONS ON MANDATORY PLANS AND ‘COMBINED EMPLOYER’ PLANS

The evolution of retirement plans from defined benefit to defined contribution took decades, and was partly the result of the institutional need for employers to free themselves of the potential liabilities for obligations owed to employees as well as a broader reaction against paternal tendencies on the part of employers toward employees. Employees were seen to be more likely to change their jobs and loyalties in careers that were less and less indicative of long service careers. In turn, organizations arguably became more impersonal, with leadership that was less and less oriented toward their particular set of employees, because the organizations were no longer as dependent upon particular industries, localities, or employees. Organizational structures and loyalties could change quickly as circumstances warranted.

While this evolution was occurring, however, the coverage rates of individual employees has not moved. The question whether the private pension system can be expected to evolve to cover closer to 100% of employees rather than 50% is therefore a valid way to evaluate whether our nation has waited long enough for full coverage or whether it wants to try something new.
MyRA may eventually cover a lot of employees who otherwise would not be covered by a retirement plan, but there is no guarantee that its implementation will necessarily lead to covering all of them, and there is no guarantee that it will lead to the broadening of real private plan pension coverage for every employee, with an array of investments and contribution possibilities similar to those of private 401(k) and 403(b) plans currently. MyRA, or something similar, is a very good step forward. However, the people of the United States may be better off not depending upon evolution to bring them into a state of retirement income security. They may want to be a little more demanding, and insist on pension coverage and the ability to make payroll contribution deductions, for every worker. That seems like a totally responsible recommendation.

In terms of a combined employer plan feature or product, such as the ‘open’ MEP, this could be implemented almost immediately after the legislation were signed. Within weeks, new entrepreneurial businesses would be created with the objective of aggregating smaller employers together and helping them to deal with pension service providers to get the best deals on pricing and services. Retirement servicing companies would be driven to compete for this new business and would provide services they generally only provide for larger retirement plans, because they would now be dealing with these larger, combined retirement plans rather than dealing with small firms individually. Employees of smaller firms would finally get a chance to participate in a company plan, and there is a possibility that some of those new firm sponsors might at some point make their own additional employer contributions to their employees’
accounts, something they cannot do without the establishment of a private retirement plan.

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**EXPANSION OF ‘AUTOMATIC’ ENROLLMENT**

There is arguably no better proof of how importantly scientific investigation and discovery have affected legislation in modern times than the case of behavioral economics’ infiltration into retirement plan design in the last 20 years.

As an example of this relatively new economic discipline, Nobel prize winner Daniel Kahneman has extensively studied human decision making and found that logical reasoning does not always play the primary role we generally like to think it does in making choices. He found, for example, that voting for school program budgets is likely to be more supportive when the voting booths are nearer schools; items printed in bold are more likely to be believed; and intuition often overcomes logic in decision making, with sometimes disastrous results. (Kahneman, 2011).

One of the things that people often do not like to do but which has to be done in order to participate in a retirement plan is to make a decision to join and contribute. Real people sometimes procrastinate and never get to the point of joining and taking charge of their account. They are not always logical about their decisions regarding retirement
planning or investing. They sometimes would rather do nothing than make a decision that is difficult.

Insights from behavioral economics have fought against this ‘inertia’ quite successfully by reversing the usual decision that has to be made regarding retirement plan participation: instead of not signing up an employee to a plan unless the employee makes the first move, the ‘automatic’ plan design will automatically sign up the employee onto the plan unless the employee opts out, that is, unless he takes an action to not join. The automatic enrollment program is generally accompanied by an automatic contribution feature, such as 3% of salary, often called the ‘default’ contribution rate. Thus, the participant also does not have to elect to make a contribution. The effort and procrastination that before resulted in no participation becomes a virtue in the automatic system because it means that a high percentage of employees will be signed up to the plan and start having contributions made without having to make any decisions at all.

As of 2011, most firms which sponsor retirement plans of over 5,000 employees have an automatic enrollment program, a doubling since 2006, though a paper by the General Accounting Office cited data from Fidelity Investments that showed that the use of automatic enrollment programs is considerably lower among smaller employers, with only about 14% of employers with retirement assets of less than $35M having adopted automatic contribution programs by 2009. Smaller employers also seemed less aware of the existence of automatic contribution programs (General Accounting Office, 2009, pp.
Participation rates tend to be about 15% higher for companies sponsoring an automatic enrollment program than those that did not, 88% vs. 73% according to one study by Charles Schwab. (John, 2011, p. 18). Thus, automatic enrollment programs have empirically proven their worth.

Many firms have also instituted ‘automatic’ default investment options that place funds that have been ‘automatically’ contributed into investments that have been chosen by the employer to provide some investment rate of return that is consistent with the employee’s age and which balances the risk of loss with the opportunity for investment returns, taking into consideration the number of years the employee has to work before retirement.

CONCLUSION AND RECOMMENDATIONS

In general, automatic contribution programs, especially those with escalating contribution rates (where the contribution rate rises every year or with every raise, under some designs), have been very successful at increasing average participation and contributions amongst medium and larger employers, and seem worthy of further support legislatively. The biggest question seems to be how to get smaller employers to adopt these programs, as many do not seem to be aware of automatic enrollment and also may be concerned over increased costs related to higher levels of matching contributions as well as ‘paper’ informational requirements related to communication and disclosure materials to an increased participation base.
Congress could potentially consider proposals to offset some of those administrative costs by providing tax credits for smaller businesses for a two or three year period after the implementation date of an automatic program. That could at least address the concerns for additional expenses beyond the cost of the contributions for newly-hired employees. A similar incentive was responsible for the Small Business Tax Credit for Start-up costs. Under this incentive, which has been in place for over 10 years, small businesses can claim a credit for up to $500 for each of 3 years after starting up a retirement plan to cover administration costs, including costs related to educating participants about the plan.

As for the cost of increased matching contributions that are sometimes concomitant with the expansion of the number of participants covered under a plan with automatic enrollment, Congress could potentially consider making it possible for employers to offer a reduced rate of employer contribution (or a period of time during which no matching contributions needed to be made) for new employees becoming participants under an automatic enrollment program, possibly extending this relief from ‘full’ contributions over a two or three-year period of service after the hire date. That way, employers would not have an incentive to reduce overall matching contribution rates in order to ‘pay’ for expanded coverage which would necessitate higher levels of matching contributions because the matching contribution would be going to more ‘automatically enrolled’ participants.
Currently, it is hard to provide for matching contributions that use less liberal formulas for newer employees than seasoned employees due to nondiscrimination requirements that attempt to equalize the contribution allocation formulas for employer contributions without regard to differing compensation levels, organizational position, or length of company service. The recommendation would be for Congress to provide incentives to employers to expand coverage by taking off some of the burden of providing matching contributions to newer employees for some period of time. Certain sections of ERISA would need to be amended to allow for this.

REDESIGNING RETIREMENT PLANS: SOLVING THE RETIREMENT INCOME PROBLEM

INTRODUCTION

Providing a retirement plan to working people is an important solution to an important piece of the puzzle of retirement income sufficiency. But it is also a fact that many working people who do have access to a retirement plan fail to save enough. In some cases it seems easy to blame them for it. In others, it is obvious that any level of savings may be difficult to achieve.

People earning good incomes would seem to have little excuse for not giving up an item of discretionary consumption, such as weekly dinners out or international vacation
travel, in favor of a more financially secure retirement. But again, we saw how real people are not always as rational and forward-looking as these voluntary occupational retirement plans really seem to require.

On the other hand, some people might have difficulty saving much of anything at all, based on their relatively lower income level and reasonable consumption needs. A family of four, whose sole wage earner makes $40,000 a year, with children’s post-secondary education to save for, and perhaps an elderly parent to look after, is not going to be worried enough about retirement at age 66 to save very much while she is struggling to barely get by in her 40’s. And retirement plans, no matter how automatic they might be, always provide the employee the freedom to cut or skip his contributions, to say nothing of providing opportunities for withdrawals of the little build-up of benefit some manage to save over a period of several years, at fairly young ages (withdrawals are generally available at age 55 and often at younger ages than that).

In this section, we will attempt to lay out the case for mandatory retirement plans with mandatory contribution levels, and which offer little opportunity of pre-retirement income withdrawals, as an example of an ‘ideal’ retirement plan.

Albeit this is a more radical step than some of the other reforms listed in this section, it is a step that solves many of the problems we have already pointed out with a voluntary
retirement income security system, steps we already have seen France and Sweden have taken and as we will soon see, steps that more and more countries seem willing to take.

MANDATORY PLANS WITH MANDATORY CONTRIBUTIONS

INTRODUCTION

We saw under the welfare state typology of the previous chapter how the ‘liberal’ welfare states, such as the United States, tend to provide basic income support (though failing to conquer poverty), but do less well in providing post-retirement income at a level that could sustain a pre-retirement standard of living. Many of the liberal states have systems that are close to Social Security in their design, and, like the United States, also provide an opportunity for employees to ‘top off’ those benefits with benefits from a private pension plan.

Together, Social Security and private pension benefits can provide a post-retirement income that can preserve the pre-retirement standard of living. However, when the retirement plan is voluntary, it may not be available to any particular employee because his employer has not established it. And when contributions are voluntary, there is no guarantee that the contributions made to it will be sufficient to supply an income that is significant enough for the employee to continue into retirement without any noticeable fall in consumption. In fact, his standard of material living might fall substantially.
Those are the uncertainties of our current retirement income security system, and these uncertainties go against any notion of retirement income security. It is with these uncertainties in mind that some are able to approach the subject of mandatory contributions with a relatively open mind. Mandatory contributions (through Social Security payroll taxes) got us Social Security benefits. Taxes of all sorts help us to maintain our national security, government, and welfare programs. Why shouldn’t we consider mandatory contributions to a private pension system as a real possibility for reducing retirement income insecurity? Many other countries, including ‘liberal’ welfare types, already have.

**THE EMERGENCE OF MANDATORY OCCUPATIONAL PENSION SYSTEMS**

**INTRODUCTION**

In this section we will briefly review possible mandatory plan designs, including some designs from other countries that have not already been reviewed. Remember, Sweden and France have mandatory or compulsory occupational coverage already. Chile, Denmark, Estonia, Hungary, Iceland, Israel, Mexico, Netherlands, Norway, Poland, the Slovak Republic, and Switzerland have mandatory occupational pension systems. Great Britain and Australia are two ‘liberal’ countries that have adopted mandatory occupational plans, meaning both that all employees are covered and that mandatory contributions are an essential requirement of each program.
A BRIEF GLIMPSE OF A COUPLE OF MANDATORY PLAN DESIGNS

Jeff Sessions, Republican Senator from Arkansas, introduced in 2006 a very interesting notion to help employees to deal with the nagging problem of insufficient retirement savings, and as a way to augment their Social Security benefits.

Senator Sessions’ PLUS Account (Portable, Lifelong Universal Savings Account) calls for mandatory annual contributions on the part of both employers and employees, equal to 1% of salary, with only salary up to $100,000 counted (which would act as a sort of ‘taxable wage base’ for this purpose). And there would be an initial contribution of $1,000 to newborns from the government, which value over a 67 year period between birth and retirement of investment compounding might be worth many times that by the time the employee retires (at a 3% real rate of return, $7246). In the long run, however, this birthday present is only a slight ‘sweetener’, though not a bad idea from the point of view of getting discussions of retirement and investments out into the foreground earlier in life than they currently are.

There are several points to make about this plan that make it stand out positively in light of some of the concerns we just discussed in relation to the coverage issue and the replacement rate issue. First, the plan would cover virtually every worker, because every employer (unless he already had a plan that was comparable) would be required to collect contributions and credit them to the employee’s retirement investment account, and the employee would be required to have an investment account. A ‘special bonus’
would be the provision of mandatory employer contributions, which would basically match employees’ contributions, dollar for dollar up to the 1% of salary threshold (which threshold would start at $100,000 and be adjusted with inflation in subsequent years).

Based on a 5.5% real rate of investment return for a worker who entered the labor force at age 22 and retired at age 66, and who contributed 1% annually and who received a 1% contribution annually from his employer based on a salary that started at $35,000 and increased at a real annual rate of 3%, the account would be worth over $250,000 at the beginning of the first year of retirement. That is two and one-half times the current median retirement savings account balance. These figures, however, are arguably based on benign economic assumptions. 27 Higher contribution rates would be needed to inject a higher level of security into the size of the benefit, or to increase the benefit.

There is more than one type of plan that has been considered by policy wonks in recent years calling for mandatory contributions that highly deserve mention. One of the most interesting and serious is designed by Teresa Ghilarducci, an economist who has generally lost faith with the current 401(k) plan system. She indicates an average 70% replacement rate is achievable with a 5% annual contribution.

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27 The investment rate of return represents a fairly aggressive portfolio, but is below the 9.55% annualized return rate of S&P 500 between 1900 and 2012. The assumed inflation rate of 3% is approximately the average rate for the same period. (These rates are based on information in MoneyChimp at http://www.moneychimp.com/), which used Robert Schiller’s (author of Irrational Exuberance [Princeton University Press 2000, Broadway Books 2001, 2nd ed., 2005] stock return data base and Yahoo!Finance databases for determining annualized returns). Calculations by Author.
Guilarducci proposes a contribution rate of 5%, but is ambivalent whether it gets paid by the employee or employer or whether it is split between them. In general, she believes that the question of who pays is immaterial, and that workers generally pay for the contributions by eventual reductions in the salary they otherwise would have received. She would also provide a refundable tax credit of $600 to employees who made the contribution but no tax deductions for the contributions. The government would guarantee a minimum 3% annual rate of return on her Guaranteed Retirement Accounts. (Ghilarducci, 2008, pp. 264, 271).

There are several other designs that have been proposed, but those with annual contribution rates in the 4%-6% categories provide a level of benefits that is capable of really shoring up the retirement income stream and significantly adding to the benefits provided by Social Security alone. For example, if you doubled the contribution rate to 4% in Session’s example you would have half a million dollars in your retirement savings account at the beginning of retirement under the assumptions made in the first example in this section.

According to the life annuity quotes available from the Thrift Savings Plan website, this $500,000 balance could generate a level monthly annuity benefit of nearly $3,000 a month, with payments starting at age 66 in July, 2014. ²⁸ Similar annuity payments

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²⁸ The Thrift Savings Plan is a 401(k) type of retirement plan for federal employees and members of the uniformed services. The website has calculators for annuities and other forms of retirement benefits payments. The website address is https://www.tsp.gov/tsp/login.shtml. Congress often refers to this plan as one of the best examples of the 401(k) type plan, although it does not cover private employees. In fact, this plan often reflects improvements in thinking in terms of design (default contributions, default investing, singing the praises of annuities) long before they become part of the legally-mandated design parameters of the private pension system, as a sort of benign experimental prototype plan.
were quoted in ImmediateAnnuities.com from several insurance companies, with some inflation-protected quotes coming in at nearly $2,000 per month. (WebAnnuities Insurance Agency, Inc.). These rates are of course subject to change.

For now, the recommendation is to continue to debate the utility of mandatory plans with mandatory contributions and examine alternatives to this type of plan in view of the poor performance of our voluntary occupational system to date. Although certainly not essential to their initial expansion, the federal government could possibly ‘jump start’ the implementation of these by, for example, offering states that might be interested in setting up a mandatory system assistance in terms of writing legal standards and providing subsidies for establishing state-wide programs, or by performing and providing results of research into the potential costs and benefits of such a system.

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**IMPROVING RETIREMENT OUTCOMES**

**HELPING LOW-INCOME EMPLOYEES TO SAVE**

**INTRODUCTION**

There is already in existence a tax credit that provides an incentive for the lower-earning employees to save. The challenge is to make this credit big enough to actually shoulder more of the burden of making a contribution for a worker and his family which may be struggling to make ends meet.
Under Section 45e of the tax code, the *Savers’ Credit* is a percentage of the first $2,000 of an eligible taxpayer’s retirement savings contributions for the year. The value of the credit is expressed as a percentage of modified adjusted gross income, which is roughly the same as ‘adjusted gross income’, or income after deductions for ‘above the line’ items such as trade or business expenses, contributions to tax qualified retirement plans, contributions to Archer medical and health savings accounts, and deductions for interest on qualified education loans. This net is then ‘modified’ further by taking out any social security benefits and increasing it by the amount of any tax-exempt interest. (Thomson Reuters/Tax & Accounting, 2013, pp. 103,489). (Internal Revenue Code Sections 25B(b) and 62).

An eligible taxpayer is an individual who is at least age 18 and is not being claimed as a dependent by another taxpayer. Certain full-time students are also excluded. The amount of the credit is determined by use of Figure 1, which is applicable for 2013.

But the maximum amount of contribution that the current *Savers Credit* covers is $2,000 per year. That may not be enough to foster a savings regimen that will produce sufficient retirement income for lower and middle income employees.
FIGURE 1: TABLE FOR SAVER’S CREDIT FROM THOMSON/REUTERS CHECKPOINT TAX RESEARCH SERVICE. ‘MODIFIED ADJUSTED GROSS INCOME: 2014 COLA ADJUSTMENTS’

<table>
<thead>
<tr>
<th>Joint Return of Household</th>
<th>Head Filing Separately</th>
<th>Single or Married</th>
<th>Size of Credit as Percentage of Contribution</th>
</tr>
</thead>
<tbody>
<tr>
<td>$0-$36,000</td>
<td>$0-$27,000</td>
<td>$0-$18,000</td>
<td>50%</td>
</tr>
<tr>
<td>$36,001-$39,000</td>
<td>$27,001-$29,250</td>
<td>$18,001-$19,500</td>
<td>20%</td>
</tr>
<tr>
<td>$39,001-$60,000</td>
<td>$29,251-$45,000</td>
<td>$19,501-$30,000</td>
<td>10%</td>
</tr>
<tr>
<td>$60,001 +</td>
<td>$45,001 +</td>
<td>$30,001 +</td>
<td>0%</td>
</tr>
</tbody>
</table>

A working couple earning wages of $30,000 and making a 3% annual contribution of $900 each (or $1800) would receive a credit of $900, which would pay for one-half of the 3% contribution. A single wage-earner earning $20,000 and making a mandatory 3% annual contribution would receive a credit of $60, or 10% of the contribution. This sort of tax relief is a lot better than nothing, but not enough to really provide an incentive to save a higher level of one’s income, which would promote a higher level of retirement income as a percentage of pre-retirement income (this is the ‘replacement ratio or rate’ which was explained in the first chapter).
The direction of these particular tax credit subsidies seems correct (they are focused on the lower-paid rather than the higher-paid), but they are simply not enough to get the contribution levels up. And the amount of contributions that society should wish to incentivize is probably in the order of 5% or 6% rather than 3% used in this last example. Perhaps a sort of matching principle could be applied to provide more of an incentive for the first few percentages of contributions and less for the last few percentages, up to 6%. We might also want to extend the ‘range’ of the subsidy to provide help to additional income thresholds above the $30,000 income level.

For the sake of ease, let us simplify this to deal with singles only, for now. Assume the incentive should have different levels of subsidy that tend to track lower as income rises, and which evidence a higher subsidy level on the lower portions of the 6% contribution rate, and lower levels of subsidy on the higher portions of the 6% contribution rate. These proposed types of subsidies would really emphasize both a higher contribution level and a means to push up the incentive on the first few percentages of a total 6% contribution. In other words, even workers who cannot contribute the entire 6% get a high subsidy on amounts less than 2%. This sort of structure provides an incentive to make contributions up to 6% but with a greater incentive on the first few percentages of income, so that at least some level of contribution is more likely to be made.
Note in Figure 2 (below) that the lowest earners pay nothing for their contribution, whether it is 2%, 4%, or 6% in our hypothetical table. The credit, which would be refundable (you get it whether or not you owe any taxes) would entirely offset the contribution – as long as the contribution is made.

**FIGURE 2: HYPOTHETICAL SAVER’S CREDIT BASED ON INDICATED MODIFIED ADJUSTED GROSS INCOME (MAGI) FOR SINGLE TAXPAYER. CREDIT IS EQUAL TO INDICATED PERCENTAGES OF EACH MAGI LEVEL FOR FIRST 6% OF AGI, DIVIDED INTO 3 GROUPS OF 2 PERCENTAGE POINTS EACH. (SOURCE: AUTHOR)**

<table>
<thead>
<tr>
<th>Single MAGI</th>
<th>Size of Credit as Percentage of Contribution on First 2 Percentage Points of Contribution</th>
<th>Size of Credit as Percentage of Contribution on Second 2 Percentage Points of Contribution</th>
<th>Size of Credit as Percentage of Contribution on Third 2 Percentage Points of Contribution</th>
</tr>
</thead>
<tbody>
<tr>
<td>$0-$18,000</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td>$18,001-$19,500</td>
<td>100%</td>
<td>80%</td>
<td>70%</td>
</tr>
<tr>
<td>$19,501-$30,000</td>
<td>80%</td>
<td>70%</td>
<td>50%</td>
</tr>
<tr>
<td>$30,001 -$40,000</td>
<td>50%</td>
<td>40%</td>
<td>30%</td>
</tr>
<tr>
<td>$40,001-$50,000</td>
<td>40%</td>
<td>30%</td>
<td>20%</td>
</tr>
<tr>
<td>$50,001 +</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
</tr>
</tbody>
</table>
Those with higher incomes would see the credit taper off. The amount of the credit would also diminish as the contribution rate went from 2% to 4% and from 4% to 6%. See the hypothetical example credit table in Figure 2.

For example, a single wage earner with modified adjusted gross income of $19,000 would receive a 100% credit for the first 2% of his contribution, 80% on the next 2%, and 70% on the last 2%. If he made a 6% contribution of $1,140, it would only cost him $76 for the portion of the contribution represented by the first 4 percentage points of his MAGI and $114 for the last 2 percentage points. Thus the $1,140 annual contribution amount would only cost him $190.

The exact setting of these ranges, of course, would need more extensive evaluation to determine the best way to set them for incentive purposes. But this illustration provides the overall strategy.

In addition, it might be interesting to investigate whether the total cost of the tax expenditures through the credit could be partially paid for by the cutback on tax expenditures discussed in the next section on limiting tax deductions. Considering the size of the subsidies we are currently providing high-income individuals to make retirement contributions, it seems likely much of this credit would be paid for by controlling the size of those deductions. Again, more information about tax deductions follows in the next section.
These credit incentives are designed to generate a real possibility for increased saving for lower-wage employees, which act would also contribute to the development of good habits of saving as well as eventual familiarity (if financial literacy programs are developed alongside of these credits) with prudent methods of investing, retirement planning, and monitoring their retirement accounts.

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**FIXING ‘UPSIDE-DOWN’ TAX INCENTIVES**

**INTRODUCTION**

The current personal tax deduction for employee contributions was instituted as a societal incentive to increase contributions by effectively making them cheaper, on an after-tax basis, to make. But because our tax rates are progressive and increase as income goes higher, a tax deduction benefits higher-income employees more than lower-income employees. 29

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29 The phrase ‘upside-down tax incentive’ was used by Gene B. Sperling in a July 23, 2014 New York Times article to express the same concern over the way that tax deductions work in a progressive tax system, namely that they turn a progressive system into a regressive one. (Sperling, 2014, p. A25).
FIGURE 3: TAX RATES, 2013

<table>
<thead>
<tr>
<th>Single Filers</th>
<th>Married Joint Filers</th>
<th>Head of Household</th>
<th>Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Up to $8,925</td>
<td>Up to $17,850</td>
<td>Up to $12,750</td>
<td>10%</td>
</tr>
<tr>
<td>$8,925 to $36,250</td>
<td>$17,850 to $72,500</td>
<td>$12,750 to $48,600</td>
<td>15%</td>
</tr>
<tr>
<td>$36,250 to $87,850</td>
<td>$72,500 to $146,400</td>
<td>$48,600 to $125,450</td>
<td>25%</td>
</tr>
<tr>
<td>$87,850 to $183,250</td>
<td>$146,400 to $223,050</td>
<td>$125,450 to $203,150</td>
<td>28%</td>
</tr>
<tr>
<td>$183,250 to $398,350</td>
<td>$223,050 to $398,350</td>
<td>$203,150 to $398,350</td>
<td>33%</td>
</tr>
<tr>
<td>$398,350 to $400,000</td>
<td>$398,350 to $450,000</td>
<td>$398,350 to $425,000</td>
<td>35%</td>
</tr>
<tr>
<td>$400,000+</td>
<td>$450,000+</td>
<td>$425,000+</td>
<td>39.6%</td>
</tr>
</tbody>
</table>

Please refer to Figure 3. A single employee earning $200,000 who makes a contribution of $10,000 is subsidized at the rate of 33%. The after-tax cost of the contribution is thus $6,700. A single employee earning $30,000 is subsidized at the rate of 15%. The after-tax cost of the contribution is therefore $8,500, or nearly two thousand dollars more than someone earning over 6 times as much. This is what is meant by the term, ‘upside-down tax incentive’. 30 Our current private pension system subsidies benefit higher-paid more than lesser-paid employees and taxpayers.

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30 Payroll taxes constitute the primary taxes paid by lower-income wage earners because the income tax has refundable earned income and child tax credits, and progressive rates, that together provide the lowest two quintiles with more credits than income taxes. The value of the deductions for contributions is
Of course, the single individual in the lower tax bracket would not be likely to be able to afford to make a $10,000 contribution, which is equal to one-third of his pre-tax income. On the other hand, the employee earning $200,000 could probably afford to contribute the maximum amount, which was $17,500 in 2013 and 2014, and $5,500 more than that if he was at least 50 years old (this is called a ‘catch-up’ contribution).

The United States uses tax expenditures to an exceptional degree for behavioral incentive purposes. But they are distributed regressively. The Congressional Budget Office (CBO) estimates that over 50% of the total benefits from the 10 major U.S. tax expenditures go to the top 20% of income earners. Only 8% go to the bottom 20%. 66% of the pension contribution and earnings tax expenditures go to the top 20%. For 2013, the value of the pension tax expenditure alone was estimated to be $140 billion annually, a figure that was over 20% of the total federal deficit for the 2013 fiscal year. Taking into account the eventual taxation of retirement distributions at retirement, the CBO estimated the tax expenditure connected to these contributions would only be about 10% lower, or about $126 billion, for 2013. (Congressional Budget Office, 2013, pp. 2,3,9,16,24).

But these tax expenditures don’t provide much help at all to the people who really need them, those in the lower part of the income spectrum.

Therefore even less than the tax rates for lower-income earners would suggest. Even the middle income quintile has an effective income tax rate of only 3%. (Congressional Budget Office, 2009, pp. 1-2).
This criticism of the current tax subsidies paid for employee contributions that predominately benefit high-income employees should provide sufficient evidence of the need for a more focused and targeted application of the current tax incentive to promote employee retirement savings.

One solution might be to cap the amount of annual contributions that are available for the tax deduction at some nominal dollar amount and/or at some percentage of pre-tax income, for example, say the lesser of $20,000 or 20% of income (this type of control on the size of the deduction has been proposed in one form or another over the last two years). Alternatively, the rate of subsidy (tax break) could be adjusted so that lower earners received more subsidy as a percentage of pre-tax income than higher earners. For example, the tax deductions for higher earners might be limited to 10%, lower earners 15%, and the lowest earners using their actual marginal rate. This type of control could also be designed using a nominal dollar basis, so that lower-earners received tax deductions on more dollars and higher-earners received tax deductions on fewer dollars of contributions.

If these controls on tax deductions were put in place, it would mean that the tax credits offered to low-income employees discussed in the last section would at least be partially paid for by the tax deductions given up by higher-income employees, and might even be expanded beyond the tax credits discussed above, for lower wage earners. That type of
tax incentive, which is more targeted to lower wage earners than the current one is, could increase the retirement income prospects for millions of average and below-average wage earners, because these credits would actually help them save more. That would seem to be an incentive that makes more sense than the current massive tax deductions that are only significant to high-income taxpayers.

**IMPROVING FINANCIAL ACUMEN AND RETIREMENT PLANNING**

Financial literacy is at abysmal levels in the United States, though it is an international problem. Only half of Americans age 55 and over could answer simple questions on compound interest and inflation in a Health and Retirement Survey performed in 2004, and in 2008 only a third of the same age group could correctly answer those two questions plus a third on diversifying risk. Younger people do not fare much better, with those with less education or those who are members of minority ethnic groups performing worse than the average. (Lusardi, Mitchell, & Curto, 2012, p. 1).

The lack of financial literacy is connected to poor investment practices and the lack of planning for retirement, a key component of engagement with the retirement issues related to the retirement plan itself. Australian researchers have found that financial literacy correlates positively with retirement planning, and that financial literacy can improve with age, with those over the age of 55 more likely to be planners than not.31

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31 Australia is one of the first developed countries to initiate a mandatory private savings program (on top of a means-tested pension financed from general revenues), and has a set of ‘default’ investment settings similar to those described earlier in this section on the United States.
(Agnes, Bateman, & Thorp, 2012). This suggests that middle-agers recognize their own incentives to learn, and that what is missing in this age group is better material better delivered, rather than any failure to be interested in the topic of retirement planning.

Our private pension system of 401(k) and 403(b) and similar plans rely on participants’ financial literacy to work. This has been pointed out several times in this chapter already. If we want employees to be engaged in their retirement planning and execution strategies, many need to comprehend more about investing and retirement planning. They need to have more tools and programs available to upgrade their skills and, hopefully, to obtain personalized and objective advice.

CONCLUSIONS

There is without any doubt a need to help more people to become more financially savvy, for reasons that go beyond the need to save and invest for retirement. These vast needs cannot all be addressed here, but certainly the acknowledgement that financial literacy is at least as important as being able to speak one’s native language and to have a standard level of familiarity with one’s country’s history might be a good way to ensure that the importance of the subject matter is reflected in the standard school curriculum.

But for our immediate purposes regarding retirement planning and participation in a retirement plan, there is a case to be made that offering more education and training about the mechanics of the retirement plan, and providing employees with the ability to
understand the differences between investments, along with knowledge of some standard diversification and risk-adjusting strategies, may go some way toward helping the average employee to deal more astutely with their responsibility toward themselves to ring every last dollar of value out of their retirement investment accounts.

Here are some specific recommendations that might be helpful to consider:

• There is currently a tax break for retirement planning services that are paid by firms to train employees on the use of their plan and on concepts related to planning for their retirement. This tax break, however, is for employees who benefit from these services (they do not have to pay taxes on the value of the training- they are treated as nontaxable fringe benefits). Employers receive a business expense deduction for paying for these services, but these expenses could potentially dissuade smaller employers from offering such services since it diminishes their bottom line. A tax credit (in addition to the business expense deduction) for smaller businesses might help to generate more employer-based seminars and training related to retirement planning.

• Along the same lines, studies have shown that employer-provided training and financial counselling lead to increases in the level of plan participation as well as increased contribution levels. (OECD, 2005, p. 57). Perhaps one way of helping (especially, small) employers to increase the sponsorship of these types of seminars and training is to provide that employees share the cost. This cost-
sharing might also be combined with a tax credit for employees’ ‘contributions’ toward that cost, up to some reasonable annual limit.

- Finally, while most people do not go out and seek financial advice, which is unfortunate, it turns out that when they do, they are not sure who to turn to. Many financial advisors are not subject to fiduciary rules, and thus there is no explicit requirement that they put their clients’ interests ahead of their own. Instead, they are subject to a secondary standard that only makes them recommend investments that are “suitable” for the client. These are referred to as **broker-dealers**. Financial advisors who are subject to fiduciary standards are called **investment advisors**. Employees generally cannot tell them apart.

A 2011 report by the SEC brought attention to the fact that many investors do not understand the difference in the titles used by broker-dealers or investment advisors and are not aware there are different standards of care. (Securities and Exchange Commission, 2011, pp. 95-96). The Department of Labor, which is also concerned with this confusion on the part of consumers as well as the loose standard of care that some advisors follow when making investment recommendations to plan sponsors and individual retirement plan participants, originally issued a proposal to broaden the application of the fiduciary standard to some financial advisors who currently would not be covered by the standard (including broker-dealers), but who dealt with retirement plans and plan participants (*Definition of “Fiduciary”, Section 2510.3-21*).
This DOL proposal was withdrawn in reaction to the securities industry’s alarm as well as some Congresspersons’ harsh opinions against it and their concern that the DOL wait to provide guidance that was consistent with the SEC’s viewpoint, which was also examining the issue. The issue is currently pending with the SEC.

However this comes out, it will be important to make clear to employees which advisors are fiduciary advisors and which are not, in order to assure them a means of reaching those advisors who really can be expected to put their clients’ interest ahead of their own, under lawful sanctions. This improved ‘illumination’ of fiduciary advisors might be achieved by a governmental agency licensing or certification program that ensured that any advisor ‘wearing’ the label of fiduciary (which label would need to be protected and sanctioned by the SEC or other regulatory body) has been properly trained, that the advisor subscribes to whatever fiduciary standard the SEC or DOL eventually develops, and that he and the firm he works for will be held to the standard.

Some public communications will also need to be provided by the agency as follow-up so that the public begins to understand what a fiduciary standard means for them, how to identify a fiduciary advisor, and what to expect from their relationship with their financial advisor in terms of meeting standards of objectivity and other responsibilities.
CONCLUSION AND RECOMMENDATIONS

In both the case of automatic enrollment and investment defaults, having something in place to overcome indecision, lack of knowledge, or failure to take action is a good thing. More enticements to get employers to use these devices should be a national retirement policy goal.

At the same time, national policy has to recognize that in order to maximize the benefits of a retirement saving program, participants must be informed and enter into experiences that include retirement planning, financial planning and investing activities. Tax credits might help small businesses to provide more financial knowledge to their employees as well as the confidence of employees to comprehend and explore their financial existence both inside and outside of the retirement plan, including when and how to obtain credible advice from an objective and nonconflicted fiduciary advisor. Each of these measures may do some good in terms of helping to ‘redesign’ employee/participants into engaged, financially literate, rational retirement planners as well as prudent and capable investors.

CHAPTER CONCLUSIONS

In this chapter we have tried to bring our focus on retirement income security back to the United States. We have learned that the weaknesses of the voluntary occupational system, or private pension system as it is also known, are a major part of the current design of the United States system and that redesigns of the type described in this
chapter will be crucial to a better performance of that system in terms of poverty reduction, increasing post-retirement income replacement rates, and enhancing retirement plan coverage.

Some of these recommended changes are to build on the ‘automatic’ enrollment and contribution features and possibly expand them to other business firms that have not yet added them. Other proposals suggest that the provision of a workplace retirement program is so important to benign retirement income outcomes that every employee should be guaranteed to have access to one. Making it easier for employers to establish retirement plans is a step in the direction of universal coverage, and a step we hope Congress will continue to expand upon.

On the more radical end of the reform proposals, some have suggested that it is time to consider mandating not only that every employee be covered by some type of retirement plan, but that minimum contribution levels be set for both employees and employers to assure that there is a sufficient nestegg accumulated by every employee by their mid-60’s so that employees can retire without any concern about a significant drop in their standard of living. While this sort of mandate may seem excessive as of the current date, there are many other countries that have such mandatory occupational programs, including some liberal countries that have moved toward that design fairly recently. As pointed out in the chapter, it would solve several of the most intractable problems of the United States’ current private pension system.
While hailing the ‘automatic’ features that help to guard against the potential failures of working people and retirees to take actions that will reduce their chances of having to lower their standard of living in retirement, we also made recommendations that could help employees to perform better in their roles as retirement and financial planners, investors, and future retirees. Learning programs and experiences that could lift the average level of financial literacy amongst both younger and middle-aged workers could promote better retirement outcomes by providing them with a realization of the importance of disciplined saving, prudent investing, and careful retirement planning, including the best practices for seeking out and obtaining skilled advisors to help them achieve their retirement income objectives.

Finally, let us remember that Social Security was not designed to provide, and does not provide, all of the income needed in retirement. The questions that must be answered boil down to these: Where will the additional source or sources of retirement income come from? How can we make that source or sources reliable, sufficient, with burdens fairly borne and benefits fairly distributed?

Hopefully some of the specific recommendations in this final chapter will provide some food for thought and debate that could start to generate some badly needed answers.
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