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PENSIONS SYSTEMS AND THE INTERGENERATIONAL DISTRIBUTION OF RESOURCES

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by

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Sections of this paper draw on Kotlikoff and Burns (2004).

Introduction

I'm delighted to be joining you at this conference and want to be the first to thank Elsa Fornero and the other organizers for inviting us. That said, I'm going to begin my remarks by sounding like a rather obstreperous participant. Specifically, I'm going to argue that the topic on which I was asked to discourse and, indeed, the topic of the entire conference, is not economically well defined. On the other hand, I'm going to point out that understanding why this is the case leads us to questions about generational policy that are well grounded, of the first order, and fully demanding of policymakers' attention.

Fiscal Relativity

At first glance, the conference's title, "How Much Redistribution Within Pension Systems? – Scope and Implications for Adequacy," looks perfectly reasonable because redistribution, particularly intergenerational redistribution, is so often connected in economic research and policy discussions to state pension systems. But looks can be deceiving. To begin, pension systems are but one of a host of apparent policies that alter the intergenerational and intragenerational distributions of resources. Other apparent policies include what is commonly referred to as the choice of the tax structure, the decision to engage in deficit finance, and the establishment of medical, welfare, and other non-pension transfer programs.

I use the terms "apparent policies" and "commonly referred to" because neoclassical economics doesn't permit us to distinguish between "different" policies when it comes to discussing the supposed effects of such policies on the intergenerational distribution of resources, the intragenerational distribution of resources or, indeed, on any economic variables.

This is a very strong statement, so let me clarify. Although it's true that any country can verbally decompose its fiscal policy into a pension system, a tax structure, a deficit policy, etc., anyone in that country or, indeed, anyone in any other country is perfectly free to re-label the country's actions so that the pension system appears to have dramatically different redistributive and other properties than those the country is publicly announcing.

Thus, for example, a pay-as-you-go pension system that, year-in and year-out, takes a large share of workers' wages and gives them to the elderly can readily be described as a fully funded pension system plus an income tax with a refundable tax credit targeted toward the elderly.

The upshot of *fiscal relativity* – the proposition discussed in Kotlikoff (2002) that taxes, transfer payments, interest payments, official debt and deficits, personal income, disposable income, personal saving rates, and all related measures are entirely determined by one's choice of language and are utterly devoid of economic content – is that one can neither intelligently discuss nor scientifically measure the role of pensions in affecting intergenerational distribution. All one can do is discuss and measure *overall* generational

policy, which I define as the government's treatment of living and future generations. And, as we'll see, even the discussion of overall generational policy is, from a scientific perspective, highly circumscribed.

The Zero-Sum Nature of Changes in Generational Policy

When it comes to discussing *overall* generational policy, the first point that needs to be made is that this policy is zero-sum in nature.[1] What does this mean? It means that if a government decides to help one generation, it will either have to hurt another generation or hurt itself, by cutting its own purchases of goods and services.

This is the clear implication of the government's intertemporal budget constraint, which can be expressed, with the proper choice of fiscal nomenclature, as equating the sum of the generational accounts of current and future generations to the present value of current and projected government purchases. Generational accounts here to the present value difference between the projected taxes a generation will pay and the projected transfer payments it will receive.

Holding fixed the government's time path of purchases, generational policy simply amounts to lowering one or more generations' accounts at the price of raising the generational accounts of one or more other generations. Such policy-induced *changes* in generational accounts *at a point in time* are well-defined economic measures in that any choice of fiscal language will result in the same measure of the change in the accounts.

The *changes* in generational accounts *at a point in time* pick up the direct policy changes in remaining lifetime resources, but do not capture changes in remaining resources associated with policy-induced changes in factor prices. However, as described in Kotlikoff (2002), welfare changes arising from factor price changes are also zero-sum in nature. Hence, holding government purchases fixed and ignoring efficiency gains or losses, policy-induced welfare gains to one or more generations imply exactly offsetting losses to one or more other generations, where the welfare gains and losses are measured as present value wealth equivalents.

Levels of Vs. Changes in Generational Accounts

If changes in generational accounts *at a point in time* are well defined, the same cannot be said of the absolute *levels* of the generational accounts of currently living generations at any given point in time. The reason is that net payments made to the government by a generation in the past can be labeled anyway one wants. Each choice of labels will alter not only the measurement of a generation's past net payments to the government, but also its projected future net payments.

[1] This statement abstracts from policies that improve economic efficiency, including those that are feasible in economies operating to the right of the Golden Rule; i.e., in which the growth rate exceeds the return to capital.

The one exception to this rule arises in the case of the generational accounts of newborns. For newborns as well as future generations, generational accounts are well defined because all net tax payments lie in the future and each method of labeling those future net tax payments will produce the same present value of net tax payments.

The bottom line then is that while we can say that a *change* in policy to policy X will hurt 40 year-olds, on average, by an amount Z (will change 40 year olds' generational accounts by Z) and help 70 year-olds, on average, by an amount Y (will change 70 year-olds' generational accounts by Y), we cannot say that under *existing* policy 40 year-olds are going to pay more than 70-year olds in net taxes, either over the rest of their lives or when they reach age 70. Whether we like it or not, the size of "net taxes" paid by any given generation under *existing* policy is in the mouth of the beholder.

Moreover, changes in a generation's account from one period to the next or comparisons of two our more generations' accounts at the same age (but, obviously in different years) are also not well defined. The reason is that changes *over time* in generational accounts may simply reflect changes in labels.

All of this is not to say that all measures and comparisons of the well being of 40 year-olds and 70 year-olds under existing policy are exercises in linguistics. On the contrary, the *overall* remaining lifetime budget constraints of existing living generations are well defined. Each choice of fiscal language will alter the "definition" of the share of a generation's remaining lifetime resources that is "private" and the share that is "public," but will not alter the *sum* of private plus public resources.

So one can say with no scientific embarrassment that 40 year-olds have V in remaining lifetime resources and that 70 year-olds have W. And one can compare the sizes of V and W, perhaps after adjusting for remaining life span. But one cannot meaningfully compare the "public" component of V with the "public" component of W let alone the "pension" components.

In short, economic theory tells us that private property is not well defined. This may bum out libertarians as well as Marxists, but that's the way the cookie crumbles.

Comparing the Economic Well Being of Living Generations

The straightforward way to compare the economic well being of living generations is, thus, not to contrast one generation's treatment by the government with that of another, but simply to consider the remaining lifetime budget constraints of the generations in question. And since remaining lifetime resources finance remaining lifetime consumption and leisure, a short hand for such analysis is to compare the current and projected future levels of consumption of goods and leisure by the generations in question.

In the case of the U.S., we have cohort-specific tabulations of consumption, but not of leisure. Table 1 shows per capita consumption by age and sex for the periods 1960-61, 1972-73, 1984-86, and 1987-90. While much of the data used by Gokhale, et. al. (1996)

in constructing this table come from various Consumer Expenditure Surveys, the figures include imputations for all consumption items, including health care, that are recorded as "personal consumption expenditures" in the U.S. National Income and Product Accounts.

The striking feature of this table is how much consumption per oldster has increased relative to that of consumption per youngster. In 1960-61, for example, 70 year-olds consumed, on average, significantly less than 20, 30, 40, and 50 year-olds consumed, on average. By the late 1980s, they consumed significantly more than 20 year-olds, and either a bit more or a bit less than 30, 40, and 50 year-olds.

For males age 65-89, per capita consumption grew by 139 percent between the early 1960s and the late 1980s, whereas it grew by only 60 percent for males age 20-59. The corresponding per capita consumption growth figures are 127 percent for elderly females and 63 percent for young and middle-aged ones.

Given that much of this remarkable rise in the absolute and relative consumption of the elderly can be traced to their increase in consumption of medical goods and services and given the rise in the level of these expenditures over the past 15 years (from 9.6 percent of GDP to 11.9 percent), there is good reason to believe that the elderly in the U.S. are now consuming more on a per capita basis than any other age group. I'd also conjecture that the elderly in the EU15 and in Japan are currently enjoying higher living standards than are their younger landsmen and landswomen.

Understanding the Increase in the Consumption of the Elderly

Gokhale, et. al. (1996) trace the increase in the consumption of America's elderly to the rise in their *overall* resources. By *overall* resources I mean the elderly's net worth, plus the present value of their future labor and pension income, plus the present value of their government future transfer payments, less the present value of their future taxes. Again, the government's choice of labels will alter the division of resources as among these components, but not the total.

Table 2 shows the levels and changes over time in remaining lifetime resources of male and female cohorts. For males 65-89, per capita remaining resources grew by 94 percent between the early 1960s and the late 1980s, whereas it grew by only 56 percent for males age 20-59. The corresponding per capita consumption growth figures are 95 percent for elderly females and 60 percent for young and middle-aged females.

As Gokhale, et. al. (1996) points out, the increase in the relative resources of the elderly over the1960s, 70s, and 80s, is not the only factor that explains the dramatic increase in the relative consumption of the elderly. The other factor is the major increase in the annuitzation of the elderly, which has taken the fear out of consumption and led to a major rise in the elderly's rate of spending (their average propensity to consume).
How much of this increase in the consumption of America's elderly over this period is due to government policy? This is very hard, indeed, impossible to say. We can determine how much the generational accounts of the elderly declined over the three

decades relative to those of the young, but as indicated above, intertemporal comparisons of generational accounts is potentially simply an exercise in semantics. Different labels of government receipts and payments will generate different statements of the relative changes over time in generational accounts and the changes over time in government labeling practices can change generational accounts with no underlying change in policy.

An analogy here might help. Consider the price of a company's stock that has risen by, say, 100 percent between 1990 and the present. Now ask yourself whether anyone can precisely pin down exactly how much of the rise was do to general market factors, changes in the safe rate of return, changes in the market price of risk, changes in the company's riskiness, changes in the covariance of the company's return with that of the market, the introduction by the company of new technology, changes in the company's management, etc? After considering this for a while, you'll likely conclude that determining exactly what caused what is impossible.

The same applies to increases in the relative resources of particular generations and the associated rise in those generations' levels of consumption. We can consider any given policy and engage in counterfactual analysis that asks how much would consumption of the elderly have differed had everything else been the same except that policy. But whether everything else would have stayed the same is an unanswerable question.

Pensions and Intergenerational Redistribution

If we can't tell precisely how much of the redistribution of resources from young and future generations to the elderly has been due to government pension and other tax-transfer programs, we certainly know from controlled policy experiments in simulation studies that intergenerational redistribution policies that are labeled as pay-as-you-go government pensions can be associated with major intergenerational redistributions. The same can be said about simulation studies of the expansion of pay-as-you-go financed health care benefits to the elderly. And we also know that governments in the U.S., Japan, and the EU have expanded these programs dramatically in the postwar period.

In arguing that, as profession economists, we need to be very careful in saying that the current intergenerational distribution of resources was due to this pension policy or this deficit policy or this health care policy, I don't mean to suggest that policies don't matter. On the contrary, they matter enormously. What I really mean to say is that we should stop discussing the effects of particular policies and start focusing on the *overall* intergenerational distribution of net resources, its changes over time, its effect on the intergenerational distribution of goods and leisure consumption, and its implications for the short- and long-run economic health of the economy.

Net resources refers to resources net of government policy. In the end, this overall net resource distribution is what matters and, in the end, this is what policymakers need to understand to make well-informed policy changes at the margin.

To make my plea for this change in focus more salient let me point out that the U.S. has been having a decades-long debate about whether Social Security's "trust fund" is real or simply an accounting identity. This debate is not about economics. It's about nomenclature. Both sides are perfectly right to claim what they are claiming. One side claims that the trust fund is real, that Social Security's finances are in better shape because of it, and that the rest of the government's finances are in worse shape. The other side claims that the trust fund is just a bookkeeping entry, that Social Security is in worse shape than most people think, and that the rest of the government's finances are in better shape. Both sides are right, because there is nothing right or wrong about a choice of language. But both sides are missing the essential point that the allocation of a country's *overall* fiscal problem among different programs is entirely arbitrary and not worth wasting one's breath discussing.

Policymakers also need to compare net with gross resources to understand whether their policies are sustainable. This brings me to assessing the fiscal burden facing future generations.

The Treatment of Current Versus Future Generations

In the U.S. case, I've documented a shift over time in the relative consumption and resources of the elderly. I view this as a direct effect of my nation's expansion of transfer programs to the elderly, the bill for which has been handed to young and future generations. But precisely how much of the improvement in the well being of the elderly is due to these programs and has come at the cost of reduced net resources of the young and future generations is, as I've indicated, probably unknowable.

So we are sitting here with two facts. The first is that today's elderly are doing a lot better compared to workers in terms of their consumption and overall remaining lifetime resources than was the case 30 years ago. The second fact, to which I now turn, is that the fiscal burden facing future generations (the difference between their gross and net resources) to pay for this largess is absolutely enormous.

As I indicated above, one can compare, with good conscience, the present value of net taxes – the generational accounts – of current newborns, assuming they are treated as current policy suggests – with those of future generations, assuming their generational accounts are adjusted to ensure the satisfaction of the government's intertemporal budget constraint. The most recent such analysis, done by Jagadeesh Gokhale and Kent Smetters (2003), suggests that if we want to insulate current generations from any fiscal adjustment, we'll have to double the lifetime net tax rates of future generations relative to what newborns now face under current policy! By *lifetime net tax rate* I mean the present value at birth of lifetime net taxes divided by the present value at birth of lifetime gross labor earnings.

To appreciate the size of the generational policy imbalance facing the U.S. and, by presumption, Japan and most EU countries, consider the following menu of pain, which shows alternative policies that, according to an updated version of Gokhale and Smetters

(2003), the U.S. would need to undertake, *on an immediate and permanent basis*, to eliminate its current $51 trillion *fiscal gap*. The term fiscal gap refers to the present value difference between all projected future government expenditures, including official debt service, and all projected future receipts, apart from money creation. The fiscal gap is a well-defined concept. Different choices of fiscal labels will not alter its measurement.

As table 3 indicates, the U.S. could immediately and permanent raise federal personal and corporate income taxes by 78 percent, or immediately and permanently cut Social Security and Medicare benefits by 51 percent, or immediately and permanently cut federal discretionary spending by 114 percent. This last option is particularly hard to do.

Unfortunately, the U.S. is not likely to adopt any policy or combination of policies that are remotely like the entrees in the menu of pain. Instead, it is likely to continue ignoring the looming generational storm associated with the significant aging of the U.S. population and the soaring costs of sustaining its elderly. Waiting just worsens the country's options because, like an unpaid credit card bill, the fiscal gap grows with interest. For example, if we wait for five years to permanently raise federal income tax revenues, the requisite tax hike will be 84 percent, not 78 percent.

The Role of Pension Policy in Addressing Generational Inequity

The U.S. is clearly playing with fire. Its fiscal gap is so large and its politicians are so irresponsible that printing huge sums of money may be the only way it will be able to "pay" its bills. This would, of course, eventuate in very high rates of inflation, if not hyperinflation, as well as very high levels of nominal and real interest rates – all of which would seriously damage the economy.

While many commentators would blame the U.S. Social Security and Medicare programs for this state of affairs, we should, at this point, relegate the allocation of blame to economic historians. For the rest of us, the real issue is designing a solution for what appears to be a highly inequitable, fiscally unsustainable, and economically life threatening generational policy.

In Kotlikoff and Burns (2004), my co-author and I offer two plans for reforming Social Security and Medicare, which, if jointly adopted, would cut the U.S. fiscal gap roughly in half. Since this is a conference on pensions, let me try our proposed Social Security reform – the Personal Security System – out on you. Even though I focus here on the U.S. system, the same plan could be adopted to reform pension systems in any country in the world.

Reforming Social Security

Table 4 details the provisions of the Personal Security System. The first thing to notice is that the plan shuts down, *at the margin*, the retirement or Old Age Insurance (OAI) portion of Social Security. Current retirees continue to receive their full OAI benefits,

and current workers receive, *in retirement*, all the OAI benefits owed to them as of the date of the reform. But once the reform is implemented, the accrual of additional OAI benefits is history.

So what would current workers receive from Social Security in retirement benefits in exchange for their past contributions to the system? They'd receive exactly what they'd get under the current system if they opted to never work another day in their lives. In this case, they'd show up at retirement with zeros in their Social Security earnings records indicating they'd had no covered earnings since the time they hit the beach. Under the PSS plan, workers would have zeros filled in their earnings records from the date of the reform onward. So in retirement, they'd receive the OAI benefits accrued as of the reform, but nothing more.

For workers close to retirement, their accrued Social Security retirement benefits are very close to what they'd received under the current system. But for today's young workers, their accrued Social Security benefits are very small. This means that over time (actually, over about 45 years), the aggregate amount of Social Security benefits that will need to be paid each year will decline to zero.

The next thing to see is that the plan doesn't alter either survivor (SI) or disability (DI) benefits. It also leaves in place the payroll taxes needed to finance these two programs. Workers would continue to make SI and DI contributions and they and their survivors would continue to receive precisely the same SI and DI benefits as under the current system.[2]

Provisions 3 and 4 deal with funding a new retirement saving system and paying off accrued OAI benefits over the next roughly 45 years. Provision 3 eliminates the OAI payroll tax, but requires workers to contribute the money they'd otherwise pay in OAI taxes to PSS accounts. Provision 4 introduces a new federal retail sales tax to pay off OAI benefits during the transition. Since the total amount of OAI benefits needed to be paid would gradually decline to zero, this retail sales tax, which would start out at roughly 12 percent, would also phase out through time, although not to zero as discussed shortly.

The elderly poor who are living solely off of Social Security will be completely insulated from the effects of the retail sales tax. The reason is that when the tax raises consumer prices, the Social Security benefits of the poor and everyone else will be automatically adjusted for a simple reason: Social Security benefits are indexed to inflation by law.

But what about the young and middle-aged poor? Well, they'll have to pay the sales tax, but they will be spared having to pay the OAI payroll tax. The plan not only spares today's poor workers higher future taxes. It also lowers the total taxes they'll face

[2] I.e., for purposes of computing survivor and disability benefits the Social Security administration would not enter zeros into workers' earnings records post the reform.

through time by forcing today's middle class and rich elderly to shoulder a much bigger fiscal burden than is now the case.

This is the really nice thing about a sales tax. Apart from the elderly poor, the tax hits everyone – old and young, and rich and poor. This is much different from the payroll tax that it would replace – which is paid only by young and middle aged workers and is paid only up to a ceiling, which currently is $87,000. Because of this ceiling, the nation's 2.1 million millionaires and its 57,000 super richies – those with more than $30 million in assets – pay a pittance, if any, of their annual incomes in OAI payroll taxes. But these people sure do know how to shop, and everything they buy, including all those incredibly expensive tickets for choice Superbowl seats, would be subject to the new federal retail sales tax.

Provisions 5 and 6 are designed to protect non-working spouses, spouses who are secondary earners, the disabled, and the unemployed. The idea is that every American adult would have a PSS account. Married workers would have to split the contributions 50-50 with their spouses, so each would end up with an equal sized PSS account. The government would contribute on behalf of the disabled and the unemployed, so these people too would end up with secure retirements. Thanks to provision 5, spouses who don't work and spouses who work, but earn a lot less than their partner, receive the same retirement income. In addition, divorced spouses walk away with their own accounts.

The 7th provision calls for the government to make matching contributions to PSS accounts on a progressive basis. The new retail sales tax would finance these matching contributions as well as cover contributions on behalf of the disabled and unemployed. That's why it would never fall all the way to zero. The current OAI system provides benefits on a progressive basis. The government's matching contributions would be structured to ensure the same degree of progressivity in the new PSS system as under the current OAI system.

Provisions 8 and 9 indicate that PSS account balances would be invested in the global financial market, but that the government would insure the downside of this invesment; i.e., it would guarantee that workers never lose the real principal that they invest in their accounts. The worst they could experience is a zero real rate of return. This means that all workers would hit retirement with account balances equal to at least the value of their past contributions adjusted for inflation.

A critical feature of the plan is the requirement that all account balances be invested in a single security – a global index fund of stocks, bonds, and real estate. Consider the alternative. With complete investment discretion, Joe Sixpack and Sally Corona Light might make precisely the same contributions to their PSS accounts each year, but end up with vastly different living standards in retirement because Joe took his uncle's stock tips and lost his shirt and Sally selected a diversified portfolio that yielded a good return. On the other hand, were Joe to accidentally make a killing, Sally would feel she was an idiot to have played it safe. She'd also feel vaguely mistreated. After all, she'd made the same

contributions as Joe, but he ended up living the life of Riley (who the heck was Riley anyway?), and she ended up scrimping on her prescription drugs.

Government-mandated retirement income security means different things to different people. But it surely doesn't mean that Uncle Sam drives Joe and Sally over to the local casino, gives them the same amount of money, points to the slot machines, and says "Good luck securing your retirement."

Under the PSS reform, there would be no commissions or fees to pay investment "advisors." Instead, a single computer, situated in the Social Security Administration, would, be programmed to buy and sell securities to ensure that the share of each security in the PSS global index fund always equals that security's share of the total value of the global financial market. The Social Security Administration would also take care of all the PSS paper work, including sending workers annual reports about their account balances.

Am I being too restrictive in not letting workers have some choice/control over their portfolio allocations? No, I'm not. Economic theory indicates that all households should be highly diversified in their asset holdings. I'm recommending the most diversified portfolio available. Giving workers the option to switch between different securities or even large classes of securities, like stocks and bonds, will lead them to try to time/play the market even were they permitted to make trades only once or twice a year. And the transactions costs of allowing such gambling will eat up too much of the available return.

By providing a lower limit of zero on the real return workers can earn, the proposal provides what amounts to portfolio insurance for the PSS accounts. The cost to the government of providing this insurance appears to be very low. But its inclusion in the plan is imperative to raise the comfort level of those scared by the short-run volatility of financial markets.

What's the rationale for including foreign stocks and bonds in the PSS index fund? It's diversification. By investing abroad, the fund will lower the riskiness of the return of the PSS index without lowering its average return. What I have in mind here is that fund would invest in all major internationally traded securities. I'm not talking here about holding shares of the Almalty stock market. What I'm talking about is investing in the London, Paris, Frankfurt, Tokyo, Hong Kong, and other major foreign stock and bond exchanges. Who would decide what constitutes the global index fund? I'd leave that decision to the Social Security Trustees who would ultimately be responsible for overseeing the new PSS system. In making that decision, they'd have to weigh the transactions costs of purchasing foreign securities against the diversification advantage.

The plan's 10th provision involves the sale of each participant's account balances at retirement and using the proceeds to purchase annuities. This sale of PSS balances would start at age 57 and continue each day for 10 years until the participant reaches age 67. By liquidating PSS balances in this very gradual manner there is much less risk of selling when the market is temporarily low. The sale would be organized by the Social Security

Trustees, and participants would receive inflation-projected pensions (annuities) starting at age 62 reflecting the proceeds of all account balances sold prior to age 62. Each year between ages 62 and 67 the amount of annuities provided to the participant would be increased based on that year's sale of the participant's remaining holdings of the global index fund.

The trustees would provide the annuities to all members of an age cohort on equal terms given the cohort's life expectancy. In providing these annuities, the Trustees would invest the proceeds from the sale of the participants' global index funds exclusively in long-term inflation-indexed government bonds. This will permit the annuities that are provided to incorporate a 2 to 3 percent real return in addition to the return arising from the mortality rates of cohort members.

The PSS plan's final provision specifies that all non-annuitized PSS account balances are bequeathable. So if a participant dies at age 55, his spouse or, if his spouse agrees in writing, his other designated heirs, would inherit his entire account balance. If a participant dies at, say, age 63, his spouse or designated heirs will inherit his remaining account balances, i.e., those funds not yet annuitized.

So, What's Not to Like?

Let me recap the PSS plan's advantages. The plan's progressive. It protects spouses. It protects divorcees. It protects the disabled. It protects the unemployed. It protects minorities and others with early checkout times. It provides everyone with the same return. It puts everyone in the market. It limits the downside risk of investing in the market. It minimizes transactions costs. It keeps investment bankers and insurance agents from getting their paws on our money. It provides everyone with the same annuity deal. It limits the market risk of annuitizing one's assets. It ensures ongoing, inflation-indexed income for the elderly as long as they live. It achieves maximum portfolio diversification. It precludes huge Social Security payoll tax hikes. And it distributes in a reasonable and fair manner the burden of paying off the benefits owed by the old system.

Conclusion

To conclude, I've argued that we need to be very cautious in blaming or praising state pension systems for any economic outcomes. Pension systems are just one part of a larger fiscal structure that redistributes across and within generations, consumes economic resources, and distorts economic choices. Rather than trying to identify what role pensions are playing in a county's fiscal policy, we should simply try to assess the overall intergenerational and intragenerational distributions of resources, the size of the government's direct consumption of goods and services, and the overall distortions in economic incentives arising from government policy.

If this investigation shows, as it does for the U.S., that overall fiscal policy is a) intergenerationally highly inequitable, b) highly distortionary, and c) completely

unsustainable, there is a remedy at hand that can alleviate each of these problems, namely the PSS proposal advanced above.

Table 1 Per Capita U.S. Consumption by Age, Sex, and Period

(thousands of 1993 dollars)

Males

Period	20–29	30–39	40–49	50–59	60–69	70-79	80–89
1960-61	12.0	15.2	15.6	14.0	11.5	9.4	8.8
1972-73	14.8	19.7	20.3	18.8	16.9	14.9	14.0
1984-86	15.3	20.6	23.6	22.2	21.7	20.0	21.5
1987-90	16.6	21.4	25.4	23.7	23.9	23.4	23.1
% Increase 87-90/60-61	**37.7**	**41.4**	**62.7**	**69.6**	**108.2**	**148.3**	**163.8**

Females

Period	20–29	30–39	40–49	50–59	60–69	70-79	80–89
1960-61	12.7	15.4	14.9	12.9	11.0	9.7	8.7
1972-73	15.5	20.6	19.7	17.6	16.2	14.6	13.7
1984-86	16.0	21.7	22.3	20.3	20.2	19.5	19.6
1987-90	17.2	22.6	24.2	22.3	22.2	22.2	21.8
% Increase 87-90/60-61	**35.7**	**46.8**	**62.5**	**72.8**	**101.8**	**129.7**	**149.6**

Source: Gokhale, Kotlikoff, and Sabelhaus (1996)

Table 2 Per Capita U.S. Remaining Lifetime Resources by Age, Sex, and Period

(thousands of 1993 dollars)

Males

Period	20–29	30–39	40–49	50–59	60–69	70-79	80–89
1960-61	269.6	273.4	259.9	224.1	178.6	142.0	103.4
1972-73	316.4	338.9	335.2	307.9	255.8	201.1	130.0
1984-86	349.5	379.2	394.9	379.3	339.9	259.7	141.3
1987-90	364.5	393.6	410.0	399.3	362.3	281.3	154.6
% Increase 87-90/60-61	**35.2**	**44.0**	**57.8**	**78.2**	**102.8**	**98.1**	**49.5**

Females

Period	20–29	30–39	40–49	50–59	60–69	70-79	80–89
1960-61	247.7	255.1	255.4	222.3	166.4	119.3	92.4
1972-73	296.3	319.0	323.2	297.3	246.2	181.8	106.3
1984-86	346.1	380.7	378.1	357.8	325.4	234.0	105.2
1987-90	365.8	399.6	397.5	378.3	346.7	253.2	116.8
% Increase 87-90/60-61	**47.7**	**56.6**	**55.7**	**70.2**	**108.3**	**112.3**	**26.4**

Source: Gokhale, Kotlikoff, and Sabelhaus (1996)

Table 3

The Menu of Pain – Alternative Policies to Eliminate the U.S. Fiscal Gap

Policy	Immediate and Permanent Percentage Change
Increase Federal Income Taxes	78
Cut Federal Purchases	114
Cut Social Security and Medicare	51

Source: Jagadeesh Gokhale and Kent Smetters, "Fiscal and Generational Imbalances: New Budget Measures For New Budget Priorities," Washington, D.C.: The American Enterprise Institute, 2003.

Table 4

The Personal Security System

1. The accrual of additional Social Security retirement (OAI) benefits is eliminated.
2. Current retirees and current workers receive their accrued Social Security retirement benefits.
3. The OAI payroll tax is eliminated and replaced with equivalent compulsory PSS contributions.
4. A new federal retail sales tax is used to pay off OAI accrued liabilities.
5. Workers' PSS contributions are shared 50-50 with their spouses.
6. The government contributes to PSS accounts on behalf of disabled and unemployed.
7. The government matches PSS contributions on a progressive basis.
8. All PSS balances are invested in a single, market-weighted global index fund.
9. The government guarantees the real principle contributed to PSS accounts.
10. At retirement, PSS balances are gradually sold to buy inflation-protected annuities.
11. Prior to retirement, workers' PSS accounts are bequeathable.

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