

# GLOBAL AGING CRISIS

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**HEARING**  
BEFORE THE  
SUBCOMMITTEE ON SOCIAL SECURITY  
OF THE  
COMMITTEE ON WAYS AND MEANS  
HOUSE OF REPRESENTATIVES  
ONE HUNDRED SIXTH CONGRESS  
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## **GLOBAL AGING CRISIS**

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**THURSDAY, SEPTEMBER 21, 2000**

HOUSE OF REPRESENTATIVES,  
COMMITTEE ON WAYS AND MEANS,  
SUBCOMMITTEE ON SOCIAL SECURITY,  
*Washington, DC.*

The Subcommittee met, pursuant to notice, at 10:04 a.m., in room 1100, Longworth House Office Building, Hon. E. Clay Shaw, Jr., (Chairman of the Subcommittee) presiding.

[The advisory announcing the hearing follows:]

# **ADVISORY**

FROM THE COMMITTEE ON WAYS AND MEANS

## **SUBCOMMITTEE ON SOCIAL SECURITY**

CONTACT: (202) 225-9263

FOR IMMEDIATE RELEASE

September 12, 2000

No. SS-22

### **Shaw Announces Hearing on the Global Aging Crisis**

Congressman E. Clay Shaw, Jr., (R-FL), Chairman, Subcommittee on Social Security of the Committee on Ways and Means, today announced that the Subcommittee will hold a hearing on the global aging crisis. **The hearing will take place on Thursday, September 21, 2000, in the main Committee hearing room, 1100 Longworth House Office Building, beginning at 10:00 a.m.**

Oral testimony at this hearing will be heard from invited witnesses only. However, any individual or organization not scheduled for an oral appearance may submit a written statement for consideration by the Committee and for inclusion in the printed record of the hearing.

#### **BACKGROUND:**

The aging of the population in the United States is well documented. In 1950, people age 65 and older comprised only 8 percent of the total population. Today, their share of the population has increased to 12 percent, and by 2030, the Social Security Administration estimates that one out of every five people will be elderly.

Societal aging is not unique to the United States—populations are aging much faster in Europe and Japan. Many experts predict that global aging will contribute to severe budget pressures, labor shortages, declining savings rates, and slower economic growth throughout the world's developed countries.

The aging of the population will have a significant impact on Social Security and other income security programs for the elderly which are financed on a pay-as-you-go basis. The Organization for Economic Cooperation and Development estimates that in some countries payroll taxes would have to double to sustain the growing costs of these old-age programs. Increasing taxes could be problematic, especially in many European countries where payroll taxes already consume more than 40 percent of payroll. To avoid further tax increases, many foreign countries may face pressure to meet their budgetary needs through deficit financing, which will have serious implications for global capital markets.

In announcing the hearing, Chairman Shaw stated: "Global aging will present some very serious challenges for Social Security programs around the world. In this global economy, we must be particularly mindful of these challenges and their remedies as we consider options for Social Security reform in the United States. The first lesson we can learn from other countries is we need to act now to avoid bigger problems down the road."

#### **FOCUS OF THE HEARING:**

The hearing will examine the effects of global demographic trends on retirement systems around the world with particular focus on economic, financial, and foreign

policy implications of global aging. The hearing will discuss Social Security crises abroad and their implications for Social Security reform in the United States. In addition, the hearing will examine the trends in employer pensions and their effect on Social Security.

#### **DETAILS FOR SUBMISSION OF WRITTEN COMMENTS:**

Any person or organization wishing to submit a written statement for the printed record of the hearing should *submit six (6) single-spaced copies of their statement, along with an IBM compatible 3.5-inch diskette in WordPerfect or MS Word format, with their name, address, and hearing date noted on a label*, by the close of business, Thursday, October 5, 2000, to A.L. Singleton, Chief of Staff, Committee on Ways and Means, U.S. House of Representatives, 1102 Longworth House Office Building, Washington, D.C. 20515. If those filing written statements wish to have their statements distributed to the press and interested public at the hearing, they may deliver 200 additional copies for this purpose to the Subcommittee on Social Security office, room B-316 Rayburn House Office Building, by close of business the day before the hearing.

#### **FORMATTING REQUIREMENTS:**

Each statement presented for printing to the Committee by a witness, any written statement or exhibit submitted for the printed record or any written comments in response to a request for written comments must conform to the guidelines listed below. Any statement or exhibit not in compliance with these guidelines will not be printed, but will be maintained in the Committee files for review and use by the Committee.

1. All statements and any accompanying exhibits for printing must be submitted on an IBM compatible 3.5-inch diskette in WordPerfect or MS Word format, typed in single space and may not exceed a total of 10 pages including attachments. **Witnesses are advised that the Committee will rely on electronic submissions for printing the official hearing record.**

2. Copies of whole documents submitted as exhibit material will not be accepted for printing. Instead, exhibit material should be referenced and quoted or paraphrased. All exhibit material not meeting these specifications will be maintained in the Committee files for review and use by the Committee.

3. A witness appearing at a public hearing, or submitting a statement for the record of a public hearing, or submitting written comments in response to a published request for comments by the Committee, must include on his statement or submission a list of all clients, persons, or organizations on whose behalf the witness appears.

4. A supplemental sheet must accompany each statement listing the name, company, address, telephone and fax numbers where the witness or the designated representative may be reached. This supplemental sheet will not be included in the printed record.

The above restrictions and limitations apply only to material being submitted for printing. Statements and exhibits or supplementary material submitted solely for distribution to the Members, the press, and the public during the course of a public hearing may be submitted in other forms.

Note: All Committee advisories and news releases are available on the World Wide Web at "<http://waysandmeans.house.gov>."

The Committee seeks to make its facilities accessible to persons with disabilities. If you are in need of special accommodations, please call 202-225-1721 or 202-226-3411 TTD/TTY in advance of the event (four business days notice is requested). Questions with regard to special accommodation needs in general (including availability of Committee materials in alternative formats) may be directed to the Committee as noted above.

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Chairman SHAW. Good morning. We are going to go ahead and start. Other members will be trickling in as they generally do.

Much has been said about the fact that the United States population is aging. Women are having fewer children. People are living

longer, and as a result, our society is graying. By the year 2030, one out of every five people will be 65 years of age or older.

The aging of the population will put tremendous pressure on the Social Security and Medicare programs. As more seniors collect benefits for a longer period of time, the cost of these programs will rise considerably. Without action, Social Security will not collect enough payroll taxes to pay all the benefits that have been promised beginning in the year 2015. At that point, we will have to start cashing in the trust funds to make up the difference, and by the year 2037, the trust fund will be depleted and Social Security will not be able to pay full benefits.

This problem is not unique to the United States. Other countries are aging much faster than we are and their pension systems are in more immediate danger than ours is. In many European countries, payroll taxes already consume more than 40 percent of workers' paychecks. Yet, the OECD estimates that taxes would need to double to solve the problem.

Because of the global community we live in today, the decisions other countries make with respect to their social security programs will have a profound impact on the United States, and our decisions, likewise, will impact on other countries. Overall, the way we choose to handle our old-age policies will impact interest rates, equity markets, and economic growth around the world.

Today, we will hear from several experts about the implications of global aging and how our policies need to adopt to the challenges ahead. I am sure one of the things they will tell us is what Americans have been saying for some time—we need to act now to address the future of Social Security.

This hearing is very timely, especially as the Presidential nominees are debating how best to save Social Security and Medicare and how to encourage other Americans to save for their own retirement. Retirement income security, often represented as a three-legged stool, consists of Social Security, pensions, and personal savings. I would note that this Congress has taken steps to strengthen each one of those legs. We appreciate the bipartisan support in the House for Social Security and Medicare lockbox legislation, as well as our plan to use 90 percent of the surplus to retire the debt. We also have strong bipartisan support for our plan to strengthen the American pension system and to expand IRAs and 401(k)s so more workers can have stronger retirement security.

We hope these bipartisan bills do not become entangled into partisan arguments on the other side of the Capitol. I hope that the Senate will follow the example of the House.

I want to thank our witnesses for being here today and I look forward to hearing their testimonies.

I must say, departing from my read remarks, that with this impending crisis and what is going on in the world today, I think it is really shameful that this chamber is not full and that there are so few people here listening to this. This is a disaster in the making. This Congress has got to act. Otherwise, the fallout, what is going to happen to tomorrow's seniors is going to really be quite disgraceful. But anyway, maybe we will get their attention.

This morning, we have just one panel and we will begin with Ben Wattenberg, and I have to apologize if I am mispronouncing names.

I am known for that and I did not practice the pronunciation. Mr. Wattenberg is a Senior Fellow at the American Enterprise Institute. Then we have Peter Orszag, Ph.D., who is President of the Sebago Associates in Belmont, California; Paul Hewitt, who is the Project Director of the Global Aging Initiative, Center for Strategic and International Studies; David Hale, Global Chief Economist, Zurich Insurance Company in Chicago, Illinois; and Vincent Truglia, Managing Director and Co-Head of the Sovereign Risk Unit of Moody's Investors Services, New York City.

Thank you all for being with us. Mr. Wattenberg, we will start with you, sir.

**STATEMENT OF BEN J. WATTENBERG, SENIOR FELLOW,  
AMERICAN ENTERPRISE INSTITUTE**

Mr. WATTENBERG. Mr. Chairman, thank you so much for having these hearings on a matter, as you pointed out, of enormous consequence. My colleagues will be speaking to some of the very specific issues that you mentioned. What I thought I would do is try to sketch out my view, at least, of what the facts on the ground are and some of the roots of this situation that is under discussion.

It seems to me that at the very root of the constellation of problems discussed under the rubric of the global aging crisis is another demographic phenomenon which I have called the birth dearth. Briefly put, this is where we are as a species in the year 2000. Never have birth rates fallen so far, so fast, so low, for so long in so many places all around the world, already headed, for most people, below the replacement level.

In 1998, there were already 61 countries that had fertility rates below the 2.1 children per woman required to merely replace a society. That is an ancient demographic axiom. If a mommy and a daddy do not have two children to replace them, sooner or later, absent immigration, a country is going to lose population. The combined population of these 61 countries is already 44 percent of the total global population. Another 34 countries with almost a billion people are poised to go below that threshold, bringing it to about 60 percent.

I think the important thing to note is that this is a phenomenon that has never happened before in world history. Demographers, were caught with their projections up about this situation. The general models following World War II and on into the 1950s and 1960s indicated that we had population growth and this would then sink. This is the so-called demographic transition, and all the very wonderful, neat charts, when the line of fertility sank from four children per woman or three children per woman would end at that magic replacement number of 2.1 and everyone would live happily ever after and we would have a sustainable and constant population.

Unfortunately, these fertility rates are not decided by demographers, they are decided by young men and women in the privacy of their bedroom and with many other things on their mind other than demographic projections, and we have seen a stunning decrease in fertility and it is at the root of the so-called aging crisis because the reason we will not have the money to pay for the elderly people retiring is not just because there are so many, in our case

the maturing of the baby boom, but because birth rates have subsequently fallen and there are a lot of people getting money and very few people paying in.

It has been said that Social Security is a Ponzi scheme, and to some extent, that is correct. But all life is a Ponzi scheme. When you are a child, your parents support you. When you become an adult, you support your babies and your parents through contributions to the Social Security fund. And then when you get old, people of middle age support you. That is what life is about. It has been going on that way probably since the beginning of human history. There is nothing wrong with the chain, but if one of the links break, when, for example, there suddenly is a harshly depleted cohort of young adults, there becomes very little money to pay for these pensions.

Of most immediate interest are the fertility rates that the United Nations categorizes as the more developed regions, which include Europe, Japan, and the United States. From 1950 to 1955, this region had a total fertility rate, that is the number of children born per woman on average over the course of her childbearing years, of 2.7 children per woman. By the late 1970s, that had fallen from 2.7 to 1.9. That is below the replacement rate. And today, it is 1.6, which is about 30 percent below what is required to merely keep a population stable.

In Europe, in Japan, and Russia, the total fertility rate is now 1.4 children per woman. That is about close to 35 to 40 percent below what is required to replace the population. The Italian demographer Antonio Golini looks at these European numbers and has a simple one-word description of what is going on: "Unsustainable." It is simply unsustainable. The dubious honor of the lowest fertility rate in the world now goes to Spain, with 1.1 children per woman, followed at 1.2 by Romania, the Czech Republic, and Italy.

This situation we are going into, with the entire Western world already below replacement, with the whole level of middle developed countries clearly heading below replacement, and the rates in the less developed countries also falling from a higher base but more rapidly than any prior demographic transition are uncharted waters. The world has never seen what we are about to see.

Now, there are plausibly positive effects to this and plausibly negative effects to flow from this birth dearth. How it works out, no one really knows. But clearly, we would be well advised to pay attention to this phenomena, which in my judgment has constantly been overshadowed by something called the population explosion, which is really yesterday's newspaper. It is a very interesting phenomenon but it is not what the world of the 21st century is going to be about.

My colleague, the late Herbert Stein, wisely noted that an unsustainable trend will not be sustained. I think he is correct. In this case, if you follow the bouncing red ball, you would end up not with zero population growth, ZPG, but you would end up with ZP. You would end up with no people at all. I am not saying that is going to happen, but these are exponentially falling rates. In Japan, the demographers are already playing games and the news-

papers are reporting it. What year in the third millennium will the last Japanese baby be born?

So as I say, an unsustainable trend will not be sustained. This birth dearth cannot go on indefinitely. It will not go on indefinitely. But when it plays out, we will be living in a very, very different world from the one we now inhabit. Thank you, sir.

[The prepared statement follows:]

**Statement of Ben J. Wattenberg, Senior Fellow, American Enterprise Institute**

TITLE: "THE PLOT THINS"

At the root of the constellation of problems discussed under the rubric of the "Global Aging Crisis" is another demographic phenomenon: "The Birth Dearth."

Briefly put, this is where we are as a species in the year 2000: Never have birth rates fallen so far, so fast, so low, for so long, in so many places, all around the world.

In 1998 there were 61 countries that had fertility rates below the "Replacement Rate" of 2.1 children per woman, required to keep a population from falling over time, absent immigration. The combined population of those countries (2.6 billion) amounted to 44 per cent of the global total. Another 34 countries, with almost a billion people, are now approaching the "Below Replacement" threshold, bringing about 60 percent of the global population to a demographic realm barely considered relevant until the last quarter of a century.

How does this relate to the aging crisis? One specific way concerns pension financing. It is sometimes said that "pay-as-you-go" retirement plans are "Ponzi schemes." Perhaps so. But life itself is a Ponzi scheme. Thus, typically, babies are taken care of by parents. When those babies become adults they provide personal support for their own children, and public support for their aged parents, through payroll contributions to government. In one form or another that chain has existed through all of human history. Problems arise not from the nature of the human chain of life, but when one of the links is suddenly weakened. If births drop dramatically, then, as the low-fertility cohort matures over time, there will be fewer working age people to pay the costs for the elderly. This is happening now, in ways that no demographer would have imagined possible until quite recently.

But the demographic changes now in motion are so remarkable and so counter-intuitive that it would be a serious mistake to consider their effects solely in relation to pension planning. The potential implications—environmental, economic, cultural, geo-political and personal—are monumental, for good or for ill, quite possibly for both.

What is happening can be best seen in "World Population Prospects: The 1998 Revision," the excellent reference book published by the United Nations, from which data used here is drawn.

Of most immediate interest to the United States are the rates concerning the "More Developed Regions," which include Europe, Japan and the United States. In the 1950-55 time period this region had a Total Fertility Rate (TFR) of 2.7 children per woman. By 1975-1980 the TFR had fallen to 1.9 children per woman, about 10 percent below the replacement level of 2.1 children. By the year 2000, in apparent free-fall, the TFR for the More Developed Regions was 1.6, roughly 25 percent below the replacement rate. The proportion of persons over aged 65 in these nations was 8 percent in 1950, 14 percent in 2000, and projected to be 26 percent by 2050.

In Europe, Japan and Russia the TFR is now 1.4 children per woman, about a third below the replacement rate. Consider some specific countries. The dubious honor of the world's lowest fertility rate now goes to Spain with 1.15 children per woman, barely edging out Romania, the Czech Republic and Italy all with rates below 1.20. The Italian demographer Antonio Golini looks at these European numbers and describes the situation in one word, "unsustainable."

American rates, substantially higher than Europe's, have nonetheless been below replacement for 28 consecutive years, averaging about 1.9 children per woman over that time. At their trough the American TFR reached 1.7 in the mid-1970s. There was a up-tick in the late 1980s taking rates almost to the 2.1 level. Since then the TFR has dropped to about 2.0 and the National Center for Health Statistics has taken note of "the generally downward trend observed since early 1991."

Notwithstanding a TFR slightly below the replacement level, the U.S. will continue to grow, in large measure because of the arrival of about one million immigrants each year. Still, because there is a mismatch between the large "Baby Boom"

cohorts and the “Birth Dearth” cohorts, America faces a pension shortfall in the out-years, which is substantial, but manageable.

The situation in Europe and Japan is much more serious. Demographer Samuel Preston estimates that even if European fertility rates would return to replacement level, there would be a 25 percent loss of total population by the year 2060.

Similar sorts of falling trends, from a higher base, are also apparent in the “Less Developed Countries” (LDC). The LDC fertility rate in 1965–70 was 6.0 children per woman. In 2000 the figure is 2.9, and in many countries falling more quickly than anything seen in prior demographic history. The imbalance between the high fertility cohorts and the low fertility cohorts in the LDCs will yield problems similar to those faced now by the More Developed Countries, only delayed by a few decades.

There is some confusion regarding the present coexistence between the “population explosion” and the “birth dearth.” Two powerful trends seem to be at war. They can co-exist, but only for a while. The “momentum effect” of the high fertility rates from earlier decades will likely yield a global population growing from 6 billion people to about 8 billion people with most of the growth occurring during the first few decades of the 21st century. But then the momentum effect of the birth dearth swings into play, slamming on the brakes, halting that growth, and most probably reversing it.

It is hard to grasp the full magnitude of the current situation. The Birth Dearth, like the population explosion, proceeds exponentially. In theory—only in theory—an on-going global TFR at Below Replacement levels does not yield ZPG. It yields ZP. Already, Japanese demographers are publicly speculating about which year in the Third Millennium the last Japanese baby will be born. The late Herbert Stein wisely noted that an unsustainable trend will not be sustained. Surely, that will be the case with the Birth Dearth. But when it plays out, we will be living in a very different world.

Perhaps the most important aspect of the new fertility patterns is this: We are in uncharted waters. The world has never seen what we are about to see. There are plausibly positive effects and plausibly negative effects to flow from the ongoing Birth Dearth. How it works out, no one knows. But, clearly, we would be well-advised to pay attention now, rather than later.

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Chairman SHAW. Thank you. Doctor?

**STATEMENT OF PETER R. ORSZAG, PH.D., PRESIDENT, SEBAGO ASSOCIATES, INC., BELMONT, CALIFORNIA**

Dr. ORSZAG. Thank you. Mr. Chairman, it is a pleasure to appear before the Subcommittee to discuss the issue of global aging. As you noted, aging populations are expected to put increasing strains on government budgets across the globe, although as you also noted, that challenge varies significantly from country to country, and, in fact, while the aging challenge in the United States is justifiably capturing the attention of policy makers, it pales in comparison to the challenge faced by many other countries—Italy, Japan, Germany.

I want to highlight three key points in my testimony this morning. My first point is that one of the most important, if not the most important, policy response to the global aging crisis is higher national saving. Such higher national saving increases future gross domestic product if it is absorbed through higher domestic investment or future receipts from abroad if it is absorbed through higher net lending to foreigners or reduced net borrowing from foreigners. Either way, the burden imposed on future workers in providing for retirement income to future retirees is reduced.

Now, the difficulty is that many pension reforms appear to raise national saving without actually doing so. For example, individual accounts would appear to raise national saving since they appear to represent a form of saving. But if individuals offset the contribu-

tions to such accounts through reduced saving in other forms, or if government saving is reduced because of, for example, the government making contributions into the accounts that would otherwise have contributed to debt reduction, total national saving may be unaffected.

The impact of Social Security reform on national saving is thus sometimes subtle, and my point is merely that we must keep our eye on that ultimate objective and not be led astray by initial appearances that may be misleading.

I would also note that the international experience suggests that while a private individual account approach could sometimes add to national saving, public trust funds also sometimes can add to national saving. There are examples, and I would mention Denmark and Norway, of countries that are running very large public trust funds that will ultimately be used to pay for pension benefits and they are running them very efficiently.

My second point is that much can be done to mend, not end, existing public pension systems. In many countries, the fact of the matter is, we are not going to see a dramatic reform that completely scraps those programs, so that paying attention to improving the parts that we can improve would be beneficial.

For example, one problem in many public systems across the globe is that they encourage early retirement. Their incentives are set up in such a way that they encourage people to retire early, but there is no reason that a public defined benefit plan has to impose such a tax on work by the elderly, and, in fact, many countries are moving to reducing such taxes or disincentives within their public pension systems.

More broadly, again, public pension systems are clearly here to stay in many countries, so it would appear to me to be beneficial to focus attention on ways that we can improve them, mend not end them, rather than necessarily focusing on completely reforming or replacing them.

My third point has to do with the projections that are often used in discussions of global aging, and that is that projections over any extended period of time, 75 years, are inherently uncertain and the economic and demographic projections that we are talking about today are no exception. I should hasten to add, that is not an excuse for failing to act today, but it is a motivation for making sure that what we do reflects that uncertainty. It is not saying that we should not act, but rather saying we should act in a specific way.

One manifestation of the uncertainty in the United States, for example, is that the Social Security actuaries prepare three sets of estimates about the long-run imbalance in the Social Security system. Those in the media tend to focus on the intermediate cost estimates, but as you know, there is also a low cost estimate and a high cost estimate. The high cost estimate shows a substantially higher projected deficit than the 1.89 percent of projected payroll that we are familiar with. The low cost estimate shows no actuarial deficit at all over the next 75 years, illustrating that uncertainty.

Now, some people have used that uncertainty to say we should not do anything at all today. That is surely as unwise a response as implementing an irrevocable change today. Instead, the best response to the uncertainty is to take steps to address the expected

problem, but to ensure that we do so in as flexible a manner as possible so that we can adjust the policy as we learn more about—as this uncertainty resolves itself over time.

And in particular, what I think the uncertainty motivates is a policy that I call flexible prefunding, so that we should prefund today but we should do it in a way that we can adjust the level of prefunding over time. How can such flexible prefunding be accomplished in the real world? One example is offered by Finland. The overall Finnish pension system is partially funded. Parts of it are funded and parts of it are unfunded. Finland created a special buffer reserve, which is currently 1.1 percent of payroll, when it joined the European Monetary Union in 1999. This buffer reserve is explicitly designed to vary over time, depending on shocks hitting the economy and other things that might affect the relative benefits of prefunding versus not prefunding, so it allows them to change the degree of prefunding in their system and is an example of flexible prefunding.

To summarize my three points, Mr. Chairman, let me just reiterate the importance of focusing on national saving as the ultimate objective, perhaps the most important ultimate objective of pension reform; mending not ending the public pension systems in many countries, since in many countries more dramatic reform is simply impossible; and exploring ways in which we can adjust flexibly to future developments. We should not wait to raise national saving in the face of the coming demographic challenge, but neither should we adopt policies that irrevocably tie our hands should that challenge turn out to be smaller than we currently expect. Thank you.

[The prepared statement follows:]

**Statement of Peter R. Orszag,<sup>1</sup> Ph.D., President, Sebago Associates, Inc.,  
Belmont, California**

Mr. Chairman and Members of the Subcommittee, my name is Peter Orszag. In addition to running an economics and public policy consulting firm in California, I teach macroeconomics at Berkeley. It is a pleasure to appear before the Subcommittee to discuss the issue of global aging.

Aging populations are expected to put increasing strains on government budgets across the globe. Three major factors affect the demographic structures of countries: fertility, mortality, and migration. Since the beginning of the industrial revolution, mortality rates have steadily improved in most countries of the world, especially during the twentieth century. At the same time, fertility rates have been declining. Consequently, today each working individual supports a greater number of old people than before, and the situation is projected to grow more severe over the coming decades.

For example, in 1990, the ratio of the population aged over 60 to those aged 20–59 in Europe was about 36 percent. This figure is projected to increase to 59 percent by 2040, due to increased life expectancy and falling fertility rates. For the world as a whole, the World Bank (1994) projects the percentage of the population aged 60 or over will increase from 9 percent in 1990 to 16 percent in 2030. As the population ages, government budgets will come under increasing strain.

Although the challenges posed by aging populations represent a global phenomenon, the extent of that challenge varies significantly from country to country. Indeed, while the projected aging of the population in the United States is justifiably capturing the attention of policy-makers and the public, it is much less daunting than the challenges faced by most other industrialized economies. For example, according to both official forecasts and those produced by Mountain View Research, the expected increase in, and longer-run level of, the old-age dependency

<sup>1</sup>Dr. Peter R. Orszag is President of Sebago Associates, Inc. (<http://www.sbgo.com>), an economics and public policy consulting firm, and a lecturer in macroeconomics at the University of California, Berkeley. In his appearance before the Subcommittee, Dr. Orszag does not represent any clients, organizations, or individuals beyond himself.

ratio is much smaller in the United States than in other major industrialized economies, especially Italy, Japan, and Germany (Schieber and Hewitt 2000).

With these facts as background, I want to highlight three key points in my testimony this morning:

- First, that the ultimate policy response to the global aging crisis must be to increase national saving. The impact of pension reform on national saving is often more complicated than it would initially appear, as I will discuss below.

- Second, that much can be done to “mend not end” existing pension systems. Indeed, since dramatic reform is politically unlikely in many countries, attention should be paid to ways of improving what we have rather than completely replacing it. In particular, much can be done—and is being done—to improve work incentives and promote later retirement within existing public pension systems.

- Third, that any projections over an extended period of time are inherently uncertain, and the demographic and economic projections surrounding global aging are no exception. This uncertainty is not, I should hasten to add, an excuse for failing to act now. But it is an important reminder that we should not implement irrevocable changes now, but rather pursue policies that allow us to react with flexibility to developments as they occur.

#### *The Importance of National Saving*

Let me talk first about the importance of national saving as the ultimate metric with which to judge responses to global aging. In the United States, net national saving has risen substantially over the past seven years, from 3.4 percent of GDP in 1993 to 6.0 percent in 1999. The improvement in Federal saving—that is, the contribution of the Federal budget to the pool of national saving—more than explains the entire improvement. Federal saving has moved from negative 4.1 percent of GDP in 1993 to positive 1.3 percent of GDP in 1999, a net shift of 5.4 percent of GDP. At the same time, personal saving has fallen by 3.7 percent of GDP, and other saving (including State and local government saving) has risen by just 0.8 percent of GDP. Continued increases in national saving, most likely accomplished through continued improvements in the contribution of the Federal budget to national saving rates, offer the most auspicious response to the aging challenge.

The fundamental benefit of higher national saving is that it eases the burden on future workers of providing for future retirees. Higher national saving today increases future gross domestic product (if the increase in national saving is absorbed through higher domestic investment) or future receipts from abroad (if the increase in national saving is absorbed through higher net lending to foreigners, or equivalently a larger current account balance). Either way, the burden imposed on future domestic workers in providing a given level of retirement income to today’s current workers is reduced.

Many pension reforms appear to raise national saving without actually doing so, and unfortunately semantics are often an obstacle here. In particular, “prefunding,” which is a term often used in the context of pension reform, can mean two different things. In a recent paper with Joseph Stiglitz (Orszag and Stiglitz 2000), we therefore distinguish between “narrow” and “broad” prefunding. In its narrow sense, prefunding means that the pension system is accumulating assets against future projected payments. In a broader sense, however, prefunding means increasing national saving.

The broader definition of prefunding—higher national saving—should be our ultimate objective. But we can sometimes be led astray, because prefunding in the narrow sense need not imply prefunding in the broader sense (i.e., higher national saving). For example, consider a system of individual accounts that is prefunded in the narrow sense. In other words, individuals have retirement accounts with assets in them to finance retirement income. Such accounts would appear to raise national saving, since they appear to represent a form of saving. But if individuals offset any contributions to the individual accounts through reduced saving in other forms, then total private saving is unaffected by the accounts. In other words, in the absence of the individual account system, individuals may have saved an equivalent amount in some other form (such as a mutual fund or other account). If public saving is also unaffected by the existence of the individual accounts, then national saving is not changed by the narrowly prefunded set of individual accounts—and so no prefunding in the broad sense occurs.

Similarly, consider a “partially prefunded” public pension system with a trust fund. The trust fund represents narrow prefunding, since it contains assets accumulated to finance future retirement incomes. But it is possible that the presence of that trust fund could cause offsetting reductions in non-Social Security taxes and/or increases in non-Social Security spending. If so, then the trust fund may not raise public saving or national saving. I would note that the emerging political consensus

not to spend the Social Security and Medicare surpluses is precisely what ensures that the narrow prefunding in the trust funds also corresponds to higher national saving (i.e., broad prefunding).

The impact of pension or Social Security reform on national saving is thus sometimes subtle. My point is merely that we must keep our eyes on the ultimate objective: higher national saving. Pension and Social Security reforms in countries across the globe must therefore be carefully evaluated, to ensure that their apparent benefits in terms of saving are actually realized.

#### *Improving Existing Pension Systems*

My second point highlights the importance of mending, not ending, public pension systems in many countries. Those favoring a movement toward individual accounts often highlight flaws in public defined benefit programs as a motivation for an individual account reform. For example, in many countries, public defined benefit plans incorporate substantial taxes on work among the elderly. The provisions of those plans are often an important factor in early retirement (Gruber and Wise 1999). Some proponents of individual accounts have therefore suggested moving to a system of individual accounts as a way of avoiding this blandishment for early retirement.

A public defined benefit plan, however, need not necessarily impose an additional tax on elderly work. Indeed, many industrialized countries are improving work incentives within their defined benefit structures (Kalish and Aman 1997). Here in the United States, the delayed retirement credit, which provides increased benefits to those who delay claiming benefits past the full benefit age, has been increasing, and is scheduled to reach 8 percent for each year of delayed claiming by 2005. Increasing the delayed retirement credit has a particularly strong effect on encouraging work among the elderly (Coile and Gruber 1999). The key point is that the encouragement of early retirement is not a necessary element of a public defined benefit plan. If incentives for early retirement are a problem, fixing them doesn't require abandoning the entire public pension system.

More broadly, public pension systems are clearly here to stay in some form in many countries. Therefore, it would appear beneficial to focus attention on ways in which the functioning of those systems could be improved by reforming rather than replacing them.

#### *The Effects of Uncertainty*

My third point involves the role of uncertainty. We often tend to focus on the central estimate of Social Security benefits and costs. But we must recognize the substantial uncertainty surrounding estimates of pension costs several decades into the future.

The substantial shift over the past few years in the projected long-term Federal budget balance, along with a somewhat less dramatic shift in the projected long-term imbalance within Social Security, highlights the uncertainty associated with long-term forecasts.

That uncertainty is also reflected in the long-term projections themselves. The Social Security actuaries here in the United States traditionally prepare three estimates: low cost, intermediate cost, and high cost. The intermediate estimates are the ones commonly cited in the press, and they suggest a non-trivial actuarial imbalance. Yet the current low-cost estimate shows a small actuarial surplus projected over the next 75 years at the current payroll tax rate (Social Security Administration 2000). Many observers have objected to the manner in which the Social Security actuaries reflect parameter uncertainty. But more sophisticated methodologies also show substantial uncertainty. As two leading proponents of these more sophisticated methodologies conclude, "Rational planning for the next century must somehow take into account not just our best guesses about the future but also our best assessments of the uncertainty surrounding these guesses" (Lee and Tuljapurkar 1998).

Given this uncertainty, flexibility is crucial: it allows policy to reverse itself more quickly should circumstances change. Under an inflexible system, policies are more difficult to reverse even if it becomes obvious that they had been unnecessary or less beneficial than initially thought.

In particular, and to link this point to my first point, the benefit of broad prefunding is that it makes us better off in the long run. But it also has a cost: The additional revenue that is necessary to produce it, which is sometimes called the "transition cost" to a broadly prefunded system. What if the future turns out in such a way that bearing those costs turns out to have been a mistake, or at least much less beneficial than we think it will be today?

Some analysts have used the uncertainty over long-term pension costs to argue that we should wait, and do nothing today. But that is surely as unwise a response to the uncertainty as making an irrevocable decision today. Instead, the best response to the uncertainty is to take steps today to address the expected problem, but to ensure that we do so in as flexible a manner as possible, so that we can adjust the policy response as information changes. In other words, we should adopt a system of “flexible prefunding” (Orszag and Orszag 2000).

How can flexible prefunding be accomplished in the real world? One example is given by Finland. Finland has an extensive system of mandatory employer-based private pensions, with virtually the entire private-sector working population covered. These employer-based pensions are divided into a number of different types of schemes governed by different legislation. The relevant aspect of the Finnish system is that the degree of funding changes as different components of the overall pension system are adjusted.

The overall Finnish pension system is partially funded, with some schemes—such as those for the self-employed—unfunded. (In aggregate, about three-quarters of all current benefits are financed on a pay-as-you-go basis.) Interestingly, Finland created a special buffer reserve, amounting to 1.1 percentage points of payroll, when it joined the European Monetary Union in 1999. The size of the buffer moves over time; in 2000, it is estimated that the buffer reserve will be increased to 1.4 percentage points. The buffer is explicitly intended to provide a flexible source of prefunding: It can be adjusted in response to external shocks and thus offset some of the adjustment costs that would otherwise be associated with European Monetary Union (Herbertsson, Orszag, and Orszag 2000).

The key point is that changing circumstances may warrant a change in the degree of funding within the pension system. This guidance seems consistent with sound pension policy-making and even common sense: Maintain some flexibility to respond to future events, but don’t allow uncertainty to impede action today.

To summarize my three points, Mr. Chairman, let me just reiterate the importance of focusing on national saving, mending not ending public pension systems in many countries, and exploring ways in which we can adjust flexibly to future developments. We should not wait to raise national saving in the face of the coming demographic challenge, but neither should we adopt policies that irrevocably lock our hands should that challenge turn out to be smaller than we currently expect. Thank you.

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Chairman SHAW. Thank you. Mr. Hewitt?

**STATEMENT OF PAUL S. HEWITT, PROJECT DIRECTOR, GLOBAL AGING INITIATIVE, CENTER FOR STRATEGIC AND INTERNATIONAL STUDIES**

Mr. HEWITT. Mr. Chairman, I am Paul Hewitt and I am Project Director of the Global Aging Initiative, which is a three-year project to look at the international implications of the simultaneous aging of the major industrial nations. It is conducted under the aegis of a Commission on Global Aging, on which you sit, sir, as well as Mr. Matsui, the ranking member of this subcommittee. The Commission is headed by former Vice President Walter Mondale, former Prime Minister of Japan Ryutaro Hashimoto, and former President of the Deutsche Bundesbank Karl Otto Pohl. It includes many leading economists, financial analysts, demographers, scientists, medical experts, retirement experts, and legislators, including cabinet officials from three continents. I am pleased to recognize that three of my colleagues on this panel are members of the Commission on Global Aging.

When we began to analyze the consequences of the simultaneous aging of the rich countries, two aspects of this trend quickly captured our attention. First is that aging in Japan and Europe is qualitatively different than in the United States. In Japan and Europe, you have depopulation. This is the prospect that in the very near term, their populations will be shrinking, and that going forward, as we look into the mid-century, we see that after 2010, their working populations, in particular, will be declining by as much as one percent a year. This will have a contractionary effect on economic activity.

The second significant aspect of this crisis is that the sum is likely to be larger than the parts. That is, there is no safety in numbers, as we baby boomers long ago learned. Indeed, there is the potential for our domestic aging crises to product significant global spillovers. Because of this possibility, it is in our interest to begin a frank dialogue with our major trading partners to ensure that they do not export crisis.

All of the industrial nations are entering an era of chronic labor shortages. This will begin, probably, by 2010 in most countries, perhaps here sooner, and our growth potential will decline over time, as our productive population shrinks. A nation's GDP is simply the multiple of its average income times number of workers. And so, when we have shrinking working populations, over time, we have the potential for shrinking GDPs.

The U.S. Census Bureau estimates that Italy's working-age population, 20 to 64, will decline by 47 percent over the next half-century, Germany's by 43 percent, Japan's by 36 percent. Much of this decline is already locked in. So whatever the actual numbers turn out to be, it is virtually certain that we will have lower growth potential going forward.

Countries with shrinking populations could also experience contracting demand and declining unit sales for as far as the eye can see. I recently explained to the chairman of Fiat that Italy faced a dramatic decline in its labor force, and he said, "Why should I lose sleep over that? We have high rates of unemployment for

Italy's youth and that's what I lose sleep over." I said, "How are you going to cope with the prospect of declining car sales for at least the next half-century," and he said "I will now have to lose sleep over your problem." In point of fact, Fiat will probably cope by moving its business outside of Italy increasingly.

Capital flight will be the by-product, and to a certain extent, I think this is evident in the decline of the Euro, which is caused by capital flight to America. Perhaps we should add another line to the Statue of Liberty: "send us your money, too."

We will see the collapse of asset values. Certainly, there will be industrial overcapacity in the construction sector and so forth. For example, over the next 20 years, the number of Italians in their household buying years, 25 to 40, will decline by almost 30 percent. So this will certainly affect real estate and other tangible asset values.

Military weakness will probably also be a side effect, because rising old-age income and health support costs will crowd out defense programs. There will be a huge increase in the number of senior citizens in the developed world and a relatively smaller increase in the number of people who will pay for their benefits under pay-as-you-go programs.

I think as you get out a little bit further into this decade, you will start to see the potential for large fiscal crises, perhaps even default risks. By the 2020s, there could be a global capital crunch. According to OECD, the combined effect of all of these older populations retiring at the same time and spending down their assets could reduce national savings in the OECD countries by as much as eight percent of GDP by 2030.

Declining savings rates in the industrial world may shift the role of international lender to the developing world. That means, for example, when America shifts its national debt from the Old Age Insurance Trust Fund into the hands of private investors in the 2020s to cover expected payroll tax shortfalls, we may be borrowing heavily from the developing world.

So there are a whole series of foreign and domestic policy issues raised by the simultaneous aging of the industrial countries. To the extent that other countries export their crises to us, they will also undermine the potential growth of our 401(k) and personal retirement accounts. I personally believe that Japan is already experiencing the symptoms of an aging recession. If their working population, and total population were still growing at the same rate as in the 1970s, we probably would not be as concerned about Japan's growth rate. Clearly, with the number of workers and the number of consumers declining, all economic growth will have to come from technology, and also from more efficient forms of economic organization, which lead to increased labor and capital efficiency.

Because of these population dynamics, it is my view that in the aging counties, retirement security increasingly will hinge on owning assets abroad, and that countries that have not spread around the ownership of financial assets are going to find themselves increasingly unable to tap into the earnings of a dwindling, overtaxed labor force or a few big corporations which now are able to move their capital and even their headquarters to more hospitable climes. Thank you.

[The prepared statement follows:]

**Statement of Paul S. Hewitt, Project Director, Global Aging Initiative,  
Center for Strategic and International Studies**

Chairman Shaw and Congressman Matsui, thank you for your leadership in highlighting the important issues raised by global aging.

The Global Aging Initiative is a project by the Center for Strategic and International Studies to examine the international implications of the simultaneous aging of the major industrial nations. Our work is being conducted under the aegis of a 75-member blue-ribbon Commission on Global Aging, headed by former Vice President Walter Mondale, former Japanese Prime Minister Ryutaro Hashimoto, and former Deutsche Bundesbank President Karl Otto Pohl. Among its members are cabinet ministers, senior legislators, appointed officials, leading business people, economists, demographers, scientists, and experts in retirement, medicine, finance, and national security from three continents. In addition to the Chairman and ranking minority member of this Subcommittee, I am pleased to recognize three other participants in today's panel as colleagues on the Commission.

When CSIS first conceived the Global Aging Initiative in 1998, we were aware that other industrial countries either were actively debating, or had already undertaken pension reforms of the kind being discussed in America. Our initial approach was to look at how foreign governments were coping with the challenges of aging populations.

But as we explored things further, we found that there were aspects of global aging which made it more than just a matter of comparative policy. The first is that population aging in Japan and Europe is qualitatively different than our own. While America will see a greater percentage rise in the number of elderly than Europe and Japan will, our working population will continue to grow for the foreseeable future. By contrast, our major allies can expect a dramatic decline in their youth and working age populations. Under the Census Bureau's long range estimate, their combined populations could fall by nearly one-third over the next half century. This has a host of economic implications for the nations involved. Declining numbers of workers and consumers inevitably will exert a contractionary effect on their growth rates, asset values, savings rates, and currencies. If this happens, tax revenues are sure to disappoint, in turn, making it harder to fund retirement benefits without big tax increases or big budget deficits. Convulsive change in these circumstances may be hard to avoid.

This possibility suggests a second dimension to the global aging crisis, which is that the whole may be larger than the sum of its parts. That is, as we baby boomers know all too well, when it comes to aging, there is no such thing as safety in numbers. The fact that all of the rich countries will simultaneously experience a dramatic upward shift in their population age structures creates the potential for global economic and political spillovers. These factors could limit our own options for Social Security reform and impose additional burdens that are not immediately obvious when looking only at our national picture. Retirement security for Americans is probably going to require cooperation abroad. No matter what we do to shore up Social Security, our efforts could be undone by crises in other countries.

The thrust of my testimony today is that these pressures are already evident in the global economy, and they are likely to become far more powerful over the coming decades. Consider that over the last 25 years, the number of elderly in the major industrial countries rose by 45 million, while working age populations grew by 120 million. In the next 25 years, according to official projections of the various affected countries (most of which are probably optimistic), elder populations will rise by 120 million, while working age populations will rise by just 5 million.

What follows, Mr. Chairman, are only my own views, and not those of CSIS or the Commission on Global Aging. Nevertheless, they are well-supported by the facts. There are other plausible interpretations of some events and trends. But I think the general direction is clear.

- *The world may be on the threshold of a new period of turbulence.* In recent decades, it would seem, we have banished the business cycle. But booms and busts have been the historical rule, rather than the exception. Under current patterns of work and retirement, the developed world as a whole could experience long periods of economic stagnation and decline. How serious these problems become will depend on institutional flexibility in the various countries. For Japan, Italy, and Germany, however, time is running short. I am pessimistic that they can adjust their systems of economic regulation and social provision fast enough to prevent their welfare States from plunging into crisis. Japan's extraordinary debt, now officially equal to

12 percent of world GDP, but unofficially perhaps half again higher, is the most worrisome in the short term. It is a time bomb waiting to explode.

But as bad as Japan's situation looks today, in some ways, Europe's is worse. By the end of this decade, the populations of Italy and Germany will be declining faster, and their union movements, which consist in large part of retirees, are more adamant against change. Last March, Japan quietly cut pension benefits by 20 percent for the typical 40 year old. In contrast, France's taxi drivers, who recently shut down the economy in protest over gas prices, were demanding even earlier retirement—this, in a country where the average age of retirement is 59.

- *Within two decades, much of the industrial world could find itself in the grip of aging recessions.* Aging recessions are marked by declining asset values, falling levels of consumption, spikes in precautionary saving by aged workers, falling growth rates and hence tax revenues, chronic budget deficits, declining returns to investment, capital outflows, and currency crises. If this sounds familiar, it should. Japan, in my opinion, already is in an aging recession. Its population has leveled off and soon will decline. Consumer spending has fallen for 29 straight months. Property values have collapsed. The retail and construction sectors are on deficit-financed life support. Due to the unique characteristics of the Japan's social compact, the economy remains more or less at full employment. Yet, under these conditions, fiscal stimulus is ineffective, since you cannot stimulate an economy when there are few new workers to bring into the labor force. Monetary policy is also proving counter-productive, to the extent that lowering of rates of return merely prompts aging workers to save more. After 2010, these conditions are likely to prevail throughout much of Europe, as well.

Indeed, in its flagging currency, the euro, Europe, too, is beginning to exhibit symptoms of decline. Capital is fleeing the Continent at an unprecedented rate. Despite today's unfavorable exchange rates and the supposed overvaluation of U.S. equities, German companies announced \$94 billion in U.S. acquisitions in August alone. One reason for this is that European firms face the prospect of declining unit sales for as far as the eye can see. A real estate shakeout is also on the horizon. Italy, Germany and several smaller countries will experience dramatic declines in their household forming age groups—Italy could have 30 percent fewer persons aged 25–40 by 2020. These kinds of pressures are sure to weaken household and financial institution balance sheets, spawning weakness elsewhere.

- *By the 2020s, a global capital crunch could damage relations with the developing world.* Rising elderly dependency is expected to undermine savings rates across a band of countries that today account for almost two-thirds of global economic output. Surging retiree populations in the industrial world mean that large numbers of affluent households will be spending down their life savings in unison. One estimate by the OECD shows that retirement alone could depress private savings rates by 8 percent of the combined GDP of the 22 OECD countries by the late-2020s. When governments run budget deficits under these conditions—for example, to pay benefits during some future slump—they will be borrowing from the third world, in the process, raising the cost of capital everywhere. It is possible that countries like China, India, and Indonesia will resist the mantle of international lender, much as America did in the 1920s. And if they opt for protectionism, as we did during the recession of 1930, a similar result could ensue.

- *We are sure to become militarily weaker, even as our defense needs shift from protecting borders to protecting our growth rates.* We must grow steadily in order to finance our social guarantees. But these conditions require world peace. And yet, the defense programs of America and its allies will face enormous fiscal competition from old age benefits. Our combined unfunded pension liabilities are roughly equal to world GDP. And our unfunded health care liabilities may be of a similar magnitude. As these obligations come due over the next 30 years, our defense spending is likely to suffer. Our allies no longer possess first-rate militaries. Our own military faces its own aging problem. The equipment we purchased during the Cold War is wearing down. Under the current budget baseline, our armed forces will shrink to half their current size by 2010. Combined with the deteriorating capabilities of our allies, this may leave us unable to deter or resolve foreign crises that threaten global growth rates, and hence our ability to finance Social Security.

Global aging has the potential to be a first rank crisis, one that wipes out the modern welfare state, as we know it. If Europe follows Japan down the road to fiscal insolvency, the tax revenues and market returns on which America's retirees depend are sure to suffer. What would happen to our IRAs and 401(k)s if Japan were to default on its debt, or Europe were to debase the euro? These possibilities are real; and it is this fear which motivates Europe's left-of-center governments to advocate reforms that here are branded as ideologically far to the right. Whether it is the ex-Communist Massimo D'Alema in Italy or Gerhard Schröder and his Red-

Green coalition in Germany, progressive governments are putting aside ideology to cut back on benefit guarantees and institute systems of private retirement provision.

There is much for America to learn from these crises. For example, our current plan for Social Security is to flood the bond markets after 2020 with trillions of dollars of our national debt. The idea is that over the next 15 years we would shift virtually all of the privately held national debt into the Old Age Insurance Trust Fund, a public agency. But then, beginning in 2017, the Trust Fund would sell this debt back to private investors at a time when Europe and Japan are no longer expected to be supplying the global capital markets. The baby boomers' retirement security might thereby hinge on heavy borrowing from the third world. This, it seems to me, is bad foreign policy, bad economic policy, and bad retirement policy.

In conclusion, Mr. Chairman, there is a new source of retirement insecurity that we must insure against. It is the growing fragility of the welfare state itself. In Europe, individuals are learning that the best way to guarantee retirement security is to own assets abroad—not only in America, but the fast-growing emerging markets. If we invest our pensions in countries, like India, with large labor surpluses and low productivity, our capital and technology can generate large returns that can be shared back with retirees in the industrial countries. In this way, the young will still support the old, but across national borders and not simply within them.

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Chairman SHAW. Thank you. Dr. Hale?

**STATEMENT OF DAVID HALE, PH.D., GLOBAL CHIEF  
ECONOMIST, ZURICH INSURANCE GROUP, CHICAGO, ILLINOIS**

Dr. HALE. Yes. Thank you very much for the opportunity to speak to the subcommittee. My firm is responsible for the management of over \$200 billion of retirement savings in this country and elsewhere in the world, so needless to say, we pay very close attention to these demographic trends which will be a profound influence on both the U.S. and the global economy here in the 21st century.

In any case, I wanted to examine a variety of different aspects of this issue here in the next few minutes. First just to summarize, as my colleagues have pointed out, we do confront an unprecedented aging challenge in the next few decades. Two-thirds of all the people who have lived to the age of 65 in the whole history of mankind are alive today. As a result, demographic factors that have already happened—declining birth rates—there will be a profound change in the next 20 or 30 years in the ratio of working to dependent people.

And finally, there will be a major change, as well, in the composition of the world's population. Because birth rates are still much higher in developing countries than in Europe or North America or Japan, the industrial countries' share of world population will fall from 20 percent recently to just 12 percent in a few decades' time, and this trend might continue indefinitely. We just do not know yet what is going to happen to birth rates in the developing countries as they become more affluent and as their economies evolve further.

In the United States, this challenge has, again, several different components. First, we know from numerous actuarial studies that our Social Security fund will exhaust its resources at some point in the third decade of the millennium, of the century.

Secondly, only about half the American population currently has any kind of private retirement savings. So a significant number of

people will confront the possibility of a big decline in living standards when they approach retirement as a result of their failure to save adequately. Indeed, the U.S. is now unique among all the industrial countries in having a negative household savings rate. For most of our history, we had a savings rate somewhere between four and eight percent. As a consequence of recent wealth creation from the stock market, our savings rate has collapsed.

And finally, there has been a profound change in the last ten years in the character of U.S. retirement savings. Ten and 15 years ago, most Americans had something called a defined benefit pension plan. That pension plan was basically a corporate liability in which an employer guaranteed to a worker or to an employee a certain level of retirement income when he left the firm. Today, a growing share of our retirement income is now going to come from defined contribution plans, where workers rather than companies assume responsibility for managing these assets. It is not a corporate liability. In fact, it is a household or personal asset and, therefore, the returns will fluctuate with what happens in the stock market and the bond market.

Now, in recent years, the stock market has done so well, defined contribution plans have enjoyed significant gains. Indeed, the value of all private pension assets in this country has increased from \$3 trillion ten years ago to \$12 and \$13 trillion recently, a very, very significant wealth gain and one which, in part, explains why the personal savings rate of the United States has collapsed.

Ironically, it was commonly argued on Wall Street ten years ago that during the 1990s, the savings rate would rise sharply because of the aging of the baby boom generation and the need for this generation to set aside more retirement savings to get ready for its aging and for retirement in the second and third decade of this century. But because of these tremendous wealth gains, the savings rate has collapsed. The driving force for U.S. savings in recent years has not been demography, it has been productivity. The spectacular growth of productivity has created the stock market boom, has changed the character of monetary policy, has changed the performance of the economy in ways which have created wealth without savings.

But obviously, as we go forward, the aging of the population could at some point constrain this process. One can construct scenarios where in ten or 15 years' time, the so-called baby boom generation will be selling its equity portfolio, will be taking assets out of these large defined contribution pension plans, and, in fact, be creating selling pressure on the equity market, and the question then becomes, what would be the consequence of such a market adjustment process if it were to happen in 2010, 2015, or the years that follow.

The answer is, it might reverse some of the very benign consequences we have seen from rising equity prices here in the late 1990s. If we, in fact, had a weakening equity market, it might set the stage for the savings rate to have to increase. But as the savings rate did increase, that, in turn, could depress consumption and slow the economy's growth rate. That, in turn, could have a soft reinforcing effect on the stock market by also depressing corporate profitability.

The fact is, we are very much in uncharted territory. We cannot quantify precisely how these demographic changes will alter the performance of the markets and the economy, but there is no doubt that at some point in ten or 15 years, the reversal of this process of wealth accumulation through defined contribution plans as a result of the phenomena we had here in the 1990s could set the stage for some major economic adjustments, indeed, some major economic shocks.

This, in turn, leads to the question, what should be the policy of response? Since the Congress cannot control the performance of the economy, there is no way the Congress can directly control these outcomes. But it could attempt to try to create a better environment through a variety of policies which would influence the markets indirectly.

I think there is room for a policy agenda on three fronts. First, we could permit the Social Security fund to invest in the equity market. The Social Security Trust Fund will peak in 15 years' time with about \$3 trillion of assets. That sounds like a lot of money, but it is no longer a huge number when you compare it to the current value of private pension fund assets or what they might be in the year 2015. I can, for example, easily construct scenarios in which private pension assets in 15 years' time could be \$30 or \$40 trillion. So even a trillion dollars for the Social Security Fund would not by itself be a powerful influence in the stock market, but still, it could be a useful one. It could be a positive and on the margin make a contribution.

Secondly, the U.S. could take additional steps to try and broaden involvement in the equity market on the part of the population by bringing in some kind of organized retirement savings program, the half of the part of the population that currently has nothing. In the recent Presidential campaign, we have had candidates such as Vice President Gore offer the possibility of tax subsidies or matching tax allowances for retirement savings by low-income people. It is not clear his program has enough subsidies or incentives to, in fact, be feasible, but the issue he is addressing is an important one. We do need to do more to bring into the retirement savings programs of this country the half of the population which currently has no savings at all, and if we have these flows of money in the markets, they also could be a useful reinforcement if and when the people who currently have private pension plans are, in fact, liquidating those plans.

And finally, I think this situation also will compel us to accept and to encourage further globalization of our equity market. In recent years, there has already been a very significant expansion of foreign involvement in all of America's asset markets. Indeed, today, foreigners own about 40 percent of our Treasury debt market, 20 percent of our corporate bond market, and about eight percent of the equity market, in addition to having about \$1.2 trillion of direct investment in this country.

The bottom line is, if we go out over the next ten or 20 years, there will be rapidly growing savings in many of the developing countries which currently have populations that are on average ten or 15 years younger than this country. And all over the world today, there is now a tremendous movement to establish retirement

savings programs. I was in 22 countries last year studying the issue of pension fund and stock market development and I was very impressed by the scope and the breadth of this effort.

Thirty years ago, only two developing countries, Singapore and Malaysia, had significant retirement savings programs. Chile then introduced a very radical savings revolution in the 1980s with privately managed pension plans for the first time in the country's history, and in the last five or ten years, we have seen this program imitated in countries as diverse as Argentina, Bolivia, Peru, Mexico, and in the last few years in Eastern European countries such as Hungary and in Poland.

The World Bank now is working on a program to introduce private retirement savings to China. If you talk to Chinese government officials, they will tell you they are now pioneering the development of a stock market, pursuing major changes in their economic structure, because they recognize they have to allocate resources more efficiently, have to improve returns on assets if they are going to confront China's own future crisis with retirement. In the year 2030, China will have 400 million people over the age of 60, an unprecedented number for that society, and they will confront the same challenge we will be confronting in providing retirement income for these people.

In any case, if we do have a large new pool of global savings with the billions of people who currently live in developing countries, this could be a useful offset, a useful substitute for what might at some point in 20 or 30 years be liquidation of pension funds and equity portfolios by aging baby boomers and the aging citizens of the old industrial countries. It is hard to imagine that scenario right now because it is so contrary to our recent history and recent experience.

The bottom line is, by the year 2025 or the year 2030, we may have no alternative. We will have to have a much greater globalization of our equity market, of our capital market here in America if we are going to cope with this challenge of an aging population and the liquidation of the assets now being accumulated in their retirement savings programs. Thank you very much.

[The prepared statement follows:]

**Statement of David Hale, Ph.D., Global Chief Economist, Zurich Insurance Group, Chicago, Illinois**

WILL THE AGING OF THE BABY BOOMERS CREATE A BEAR MARKET AFTER THE YEAR 2010?

There is little doubt that the aging of the world's population will be one of the great challenges confronting all nations during the 21st century. In the old industrial nations, the ratio of working population to retired people will fall sharply. In the developing countries, rising living standards and improved health care will create a large retired population for the first time ever in the history of those societies. In the case of mankind as a whole, two thirds of all the people who have ever lived to the age of 65 are alive today.

While the aging process is a universal human challenge, the response of each country will reflect its own unique circumstances. In continental Europe, it may be possible for some countries to compensate for the decline of the population by increasing the current low level of labor force participation among young people and women. In the U.S., immigration is rapidly emerging as a popular solution to the problem of labor shortages in the nation's full employment economy. Continued high levels of immigration could also help to offset slower growth of the native population. Japan does not have a history of accepting immigration, but its level of labor

force participation is so high that the only way it will be able to maintain its current labor force without immigration will be to raise the retirement age to 90 years. This problem suggests that Japan will have to significantly change its immigration policies or experience a major economic contraction in a few decades time. The developing countries still have young populations but they will start to catch up with the aging process in the industrial countries in another thirty years. They are now preparing for this challenge by introducing retirement savings programs which could also play a major role in promoting the development of their capital markets, the privatization of State enterprises and other forms of financial liberalization necessary to allocate capital efficiently. In fact, Chinese officials now often refer to their future retirement funding challenge as one of the reasons why they have to enhance the return on capital in their economy. As China will have 400 million people over the age of 65 in 2030, it will be impossible for the country to provide retirement income to them if the economy continues to be dominated by unprofitable State enterprises.

The United States is better prepared than most other industrial countries to cope with the challenge of aging because it has a long history of institutionalized retirement savings in both the public and private sector while there is a great social tolerance for immigration as a result of the country's history. But while America enjoys many advantages, it is not totally prepared for the challenges which lie ahead. First, the Federal Government's social security system could exhaust its reserves in the third decade of the 21<sup>st</sup> century unless there are major changes in expenditure or taxation during the interim. Secondly, only about half of the working population has a private retirement savings program at its place of employment. The rest of the population will probably have only a modest level of retirement savings to supplement its income from the Federal social security program. Thirdly, during the past decade there has been a major change in the composition of private retirement savings programs from defined benefit plans to defined contributions. Under defined benefit plans, corporations have a formal liability to their employees to provide a certain level of retirement income. Under defined contribution plans, the workers take over responsibility for allocating their retirement savings to various investment products and thus are potentially vulnerable to any major correction in the stock market or bond market. The benign performance of the equity market during recent years has encouraged everyone to believe that the value of their retirement savings can only expand if they invest in mutual funds but it is unclear how long the equity market will be able to deliver returns as outstanding as those which have occurred during the 1990's. Indeed, one of the unresolved questions looming over the U.S. financial markets is what will happen in twenty or thirty years when the current baby boom generation is liquidating its equity portfolio in order to pay for retirement. Will the savings of the next generation be large enough to absorb their equity sales? Will there be a stock market correction which both depresses the income of the baby boomers and the demand for equities by the generation following them? Will the growth of retirement savings in the developing countries create an alternative source of demand for U.S. equities if Americans become sellers?

At the present time, only a few things are certain. First, the population will age. Secondly, government expenditure on retirement will expand dramatically in all the industrial countries and ultimately in the developing countries as well. Thirdly, there is likely to be a substantial increase in retirement savings during the next one or two decades as a result of efforts to get ready for the demographic challenge posed by aging. The great uncertainties center on how the financial markets will adjust to the tremendous changes now occurring in human demography. There has been a great deal written on this topic by academic and brokerage house pundits but the actual outcomes have often defied conventional wisdom and market intuition.

#### *Savings and the Aging Process*

At the start of the 1990's, it was commonly argued that there would be a large increase in the U.S. savings rate because of the aging of the baby boom generation and their need to prepare for retirement.

It was easy to understand why there was so much optimism about savings. According to Federal Reserve data, the age group 45-64 has the highest savings rate while the young and the very old tend to be dis-savers. During the 1990's, the share of the population of people aged 45-64 years rose from 18 percent to 24 percent and is likely to expand further to 25 percent by 2010. The population aged 20-34 years, by contrast, has fallen from 26 percent in 1980 to about 20 percent recently. The population over the age of 64 is constantly expanding but it is still only about 12 percent of the population compared to 10.5 percent in 1980 and a projected 20 percent in 2030.

Despite the large increase in the population of people aged 35–64 years during the 1990's, the savings rate fell rather than increased. In fact, the most recent government data shows that the household savings rate was negative during August compared to numbers in the 4–6 percent range during the first half of the 1990's.

There has been a steady expansion of retirement saving through defined contribution and benefit plans during the 1990's. According to government data, the number of retirement programs has expanded from 311,094 in 1975 to 700,000 in 1997. The number of participants has also grown from 44.5 million in 1975 to 86 million in 1997. The number of defined plans has shrunk from 170,000 in 1985 to 53,000 in 1997 but the number of defined contribution plans has swelled from 207,748 to 647,000. As a result, there are now 46 million people in defined contribution plans compared to 40 million in defined benefit whereas in 1975 there were only 11.5 million in defined contribution compared to 33 million in defined benefit plans.

The expansion of defined contribution plans is apparent in the growth of the mutual fund industry. It now has over \$7 trillion of assets compared to \$5.8 trillion in the banking system. At the end of 1999, formal retirement savings programs represented \$2.426 trillion of mutual fund assets, with about half in IRA savings and the other half in employer sponsored defined contribution pension plans. As a result, mutual funds now represent about 19 percent of the country total retirement assets of \$12.7 trillion compared to only 5 percent in 1990, when retirement assets were \$4.1 trillion.

The growth of mutual fund assets has resulted from both rising equity prices and new cash contributions. According to data from the Investment Company Institute, cash contributions last year were \$133 billion compared to \$130 billion in 1998, \$100 billion in 1996, \$74 billion in 1992, and only \$30 billion in 1990.

How could retirement savings be expanding when the savings rate is negative? The answer is asset inflation. The tremendous gains in financial asset values during the 1990's have tripled the value of retirement assets despite the fact that nominal GDP has increased by only about 56 percent. In effect, buoyant equity markets have increased the ratio of pension assets to nominal GDP from .73 in 1990 to 1.38 in 1999. There has been a dramatic expansion of the wealth of the American people despite the fact that they have lowered their savings rate. Indeed, it appears that the savings rate has declined because wealth creation in the equity market has encouraged faster growth of domestic consumption.

If some economic shock were to cause the stock market to fall sharply, this process would probably go into reverse. The value of household equity portfolios, including pension assets, would decline, but the savings rate would rise. If the stock market correction were steep and prolonged, it is even conceivable that the country would experience a recession because of the required adjustment in consumption to restore the household savings rate to its traditional level of 4–6 percent of personal income.

It is clear from the history of the 1990's that there is no straight forward correlation between personal savings and the demographic structure of the population. The savings rate fell sharply despite the aging of the baby boom generation because the benign performance of the economy permitted the household sector to create wealth through rising equity prices rather than deferring consumption. There is great dissention among stock market pundits about whether the equity market has overshot on the upside, but the bottom line is that the expansion of the country's stock market capitalization from \$4 trillion in 1990 to \$16 trillion recently has had a transforming effect on the economy generally. The investment share of GDP has increased to record levels. There has been a boom in company start-ups. Venture Capital funding has expanded from \$5 billion per annum in the mid-1990's to \$50–60 billion per annum recently. The U.S. has been able to easily fund a current account deficit equal to 5 percent of GDP because of tremendous foreign demand for U.S. corporate paper (equities and bonds) as well as foreign takeover bids for American firms.

The combination of a declining private savings rate and growing foreign demand for U.S. financial assets against the backdrop of a full employment economy with an unprecedented current account deficit has created fears that the economy is now overly dependant upon the stock market as a growth engine, but the fact is this equilibrium appears to be sustainable so long as the U.S. offers the world a high return on capital compared to other place.

What will happen when the baby boomers retire and start to sell equities from their now burgeoning portfolios? There is no simple way to answer this question. If every other factor is constant, increased equity sales could depress the market. But it is unlikely that the situation will be so clear-cut. If the U.S. is still enjoying a good economic performance compared to other countries, there could be significant foreign demand for U.S. equities from countries with discretionary wealth or ex-

panding retirement savings. The aging of the population in continental Europe and Japan could erode their savings during the next two decades, but younger countries such as China, Mexico and Brazil could be expanding their savings quite rapidly at the same time. In contrast to the old industrial countries, their pension funds are now significantly underweighted in U.S. financial assets. As a recent First Boston report note, the marginal buyer of U.S. equities during recent years has been foreigners and corporations, not households.

*“Over the next 5 years a critical mass of the working population will retire. The growth rate of the population over 65 and the fraction of the population over 65 will turn higher and keep rising until about 2020.*

*That matters for markets because the oldest cohorts of the baby bulgers could quickly become the marginal reallcoators among asset classes, because an increasingly large share of the nation’s stock market wealth is being held by older generations, and because the distinctive behavioral pattern among retirees is that they become more risk averse. Indeed, the prospect of an increasing share of the population having a shorter investment horizon (and hence?) becoming more risk averse opens up a can of worms for asset markets.*

*What will happen if retirees re-weight their portfolios, reducing their stock holdings and increasing their bond holdings? What will happen to the stock market if the retirees sell stock to a smaller generation of younger investors? Will retirees demand increased dividend payments to finance recurrent expenditure? Will they want a higher equity risk premium?*

*These are some of the key demographic issues we face, beginning just about now. They carry the weight of history on their shoulders, bearing in mind the watershed events of 1965 and 1980.*

*Reaching a clear conclusion in terms of the stock market is complicated by the fact that, for most of the 20 years, the marginal buyers of equities have been corporations and foreigners rather than households. Foreign demand, in particular, appears to have been playing a critical role over the second half of 1990s. In 1999, foreign investment funds bought US stocks outright to bolster their portfolios to the tune of net \$92bn. On top of that foreign business has also massively increased its purchases of US companies in the line with the enormous increase in cross border M&A activity. The latter ballooned to around net \$153bn in 1999, following around net \$78bn in cross border deals in 1998. The pick-up in cross border M&A is a key reason why net new issuance of US stocks has turned so decisively negative over recent years.*

*Against that background, our judgement is that an eventual shift in asset allocation by foreign investors rather than by baby bulgers poses the greater risk for asset markets. But a current account adjustment that comes just when a wave of households is trying to retire from active labor market participation would certainly be an unpleasant contingency to behold. The risk in this regard is probably worth the beginnings of some more cautious valuation of US securities markets all by itself, compounded by the intensifying scarcity of default-risk free Treasury securities to buffer domestic investors against adverse credit outcomes in a current account adjustment.”*

As a result of America’s record of unbroken current account deficits since the early 1980’s, foreigners are already major players in the U.S. financial markets. At present, they own about 38 percent of the U.S. Treasury market, 20 percent of the corporate bond market and 8 percent of the equity market. They also have direct investments in the U.S. worth about \$1.2 trillion. If the U.S. does not reduce or eliminate its current account deficit, these ratios could easily double during the next decade even without any selling of equities by the baby boomers. At present, the country’s deficit on international investments is about 18 percent of GDP compared to a surplus of 8 percent in 1981 and a previous debt/ GDP peak of 24 percent in 1894. If the current account deficit remains at 4–5 percent of GDP, this ratio will double in five years time and then rise to 60 percent of GDP by about 2010.

The most high risk scenario would be if the baby boomers had to sell equities against a backdrop of a poorly performing economy which was already depressing equity values. In such a scenario, the economy could enter a period of prolonged stagnation as declining stock values boosted the savings rate and depressed consumption. The decline in the equity market would then generate a reversal of the many positive factors which have been apparent in the recent bull market. Not only would consumption sag. There would be less venture capital for entrepreneurs. Company investment would suffer from rising equity costs. Interest rates might also rise if a declining equity market frightened foreign investors and made it more difficult to finance the current account deficit.

What actions can policy makers take to lessen these risks? As Congress cannot dictate the performance of the economy, it can address the risks posed by demography only indirectly. But it is not difficult to imagine an agenda which could lessen the risk of a hard landing for the equity market when the baby boomers retire.

First, only about half of the population currently has a private pension plan. Congress could provide more tax incentives in order to encourage all Americans to increase their retirement savings. Vice President Gore has proposed a program of matching retirement contributions for low income Americans. What remains unclear is whether low income people would have enough discretionary savings to take advantage of this proposal. But if a program could be devised to create private retirement savings for the half of the population without it, there would be a larger flow of money moving into the equity market during the next decade than is likely to occur without such intervention.

Secondly, Congress could permit the social security fund to invest in equities. The social security fund at its peak in 2015 will not be large in relation to private pension plans. It is expected to peak at about \$3 trillion compared to private pension assets of \$12 trillion today and a probable \$30–40 trillion in fifteen years time. But if it invested in the equity market, it could help to offset reduced equity purchases by the private sector. Privatization of social security could also encourage such diversification but it is not a prerequisite.

Thirdly, the U.S. should encourage the growth of private retirement savings in other countries through agencies such as the World Bank, the International Monetary fund, and even the United Nations. If the developing countries had a large and rapidly growing pool of pension assets for populations which will be far younger than the OECD's in 2010–2020, there would be a potential flow of savings to compensate for equity sales by the elderly populations of the old industrial countries.

As a result of the aging process in the old industrial countries, their share of the world's population will decline from 20 percent today to 12 percent by 2050. In the year 2050, the U.S. will also be the only industrial country on the list of the world's ten largest countries as defined by population.

The coming upheavals in the structure of the world's population will have profound implications for the development of financial markets and global capital flows. At present, the developing countries account for only about 7 percent of world stock market capitalization despite the fact they represent 45 percent of world output, 70 percent of the world's land area, 85 percent of the world's population and almost 100 percent of the projected growth in the world labor force during the next fifty years. Since the developing countries have much younger populations, they are likely to enjoy the benefit of rising savings rates during a period when the aging populations of the old industrial countries could be experiencing a decline in their savings rates.

It also is important to note that many developing countries are now establishing pension fund systems in order to prepare for the aging process. Singapore and Malaysia were the first developing countries to establish broad based central provident funds almost thirty years ago. Chile followed during the 1980's with a system of universal retirement savings managed by private companies. The success of Chile in boosting its savings rate and creating a viable retirement system has encouraged widespread imitation in other Latin American countries and eastern European countries such as Poland and Hungary. African countries with historical links to Britain, such as South Africa and Zimbabwe also have highly developed pension systems.

As a result of these developments, Latin America now has almost \$150 billion of privately managed pension fund assets and Goldman Sachs is forecasting that the total will grow to \$300 billion by 2005. Brazil has the largest pension fund assets with \$71 billion despite the fact that only 3 percent of the population is involved in the plans. Chile is next with \$34 billion of assets and near universal coverage of the working population. Argentina has \$17 billion of assets with extensive coverage of the working population. Mexico follows with \$11 billion and universal coverage of people employed in the formal economy. At the present time, Latin American pension funds have invested 24.4 percent of their assets in domestic equities, 72 percent in domestic fixed income securities, and 3.6 percent in foreign assets.

The U.S. should try to encourage developing countries to open up their pension funds to much higher levels of foreign investment than currently exist. Since emerging market countries could have trillions of dollars in pension assets by the middle decades of the 21<sup>st</sup> century, such a development could provide a potential shock absorber for OECD equity markets which could be suffering from equity sales by aging baby boomers. In recent weeks, the new Mexican president elect, Mr. Vincent Fox, has proposed much greater integration of the U.S. and Mexican economies. The U.S. could take advantage of his proposal to pioneer further liberalization of Mexico's pension fund investment policies.

The pension fund assets of the developing countries are so modest today compared to the industrial countries that little attention is paid to their investment policies and potential role in global financial markets. But the fact is pension fund growth will play an important role driving the development of domestic capital markets in

the developing countries during the next decade, and when their assets start to approach 50 percent of GDP, they could become players in global financial markets as well. In the year 2050, they could become as important a factor in global financial markets as OPEC twenty-five years ago, Japanese life insurance companies in the late 1980's, and hedge funds more recently. As a result of the aging process now apparent in the U.S. and other industrial countries, it is in the self-interest of everyone to encourage developing country pension funds to become global players by the second decade of the 21st century.

The World's Ten Most Populated Countries

[Millions of People]

1998		2020		2050	
China .....	1237	China .....	1397	India .....	1707
India .....	984	India .....	1341	China .....	1322
United States .....	270	United States .....	323	United States .....	394
Indonesia .....	231	Indonesia .....	276	Nigeria .....	338
Brazil .....	170	Brazil .....	204	Indonesia .....	331
Russia .....	147	Pakistan .....	199	Pakistan .....	260
Pakistan .....	135	Nigeria .....	184	Brazil .....	228
Japan .....	126	Bangladesh .....	171	Bangladesh .....	211
Bangladesh .....	125	Russia .....	141	Congo .....	184
Nigeria .....	111	Mexico .....	134	Mexico .....	168

*Conclusion*

In the modern period, there have been numerous articles written about how demographic changes would affect the price of home prices and real estate, not just equity markets. So far demography has appeared to be far weaker influence on asset prices than other factors, such as interest rate levels or productivity growth. The inability of economists to use demography as a forecasting tool suggest that we should not attempt to draw extreme conclusions about the impact of aging on equity markets in twenty or thirty years time. But since we can imagine scenarios in which an aging population might liquidate its equity portfolio, depress equity prices and generate other negative spillover effects on the economy, it is not too soon to think creatively about how we could lessen this risk. In the year 2000, the answers are obvious. We need to expand the potential number of equity owners at home by permitting the social security system to invest in equities while encouraging a larger global market for U.S. equities by promoting retirement savings for all of the world's people. When the cold war ended in 1989, there were probably 100 million people on the planet earth who owned a share of stock or had a pension plan. Today, the number is probably at least 300 million as a result of recent pension fund expansion in Latin America and Eastern Europe. The goal of policy makers should be to expand this number to 2-3 billion people by the year 2020. In such a scenario, it is difficult to imagine how the aging of 50 million Americans could produce a stock market slump unless the U.S. itself pursued a policy of financial protectionism.

Mr. MCCRERY. [presiding.] Thank you, Dr. Hale. Mr. Truglia?

**STATEMENT OF VINCENT J. TRUGLIA, MANAGING DIRECTOR  
AND CO-HEAD, SOVEREIGN RISK UNIT, MOODY'S INVESTORS  
SERVICE, NEW YORK, NEW YORK**

Mr. TRUGLIA. Thank you very much for the opportunity to speak before the subcommittee. At Moody's, we spend a great deal of time studying the issue of pension burdens for countries around the world. It is clear to us that rapidly aging populations in the industrial world, as well as in certain emerging market countries, will pose some complicated economic and financial problems going forward.

First, when examining the various industrialized countries, what we have concluded at Moody's is that almost every country will "default" on its pensions. What do I mean? When we talk about default on a financial obligation, basically what we are saying is that the obligor does not meet the original terms of the contract. In some way, the contract is broken. When we look at present pension promises, it is clear that the promises various governments are making to their people will not be met according to the present terms of the implied contract.

At the same time, we believe that the public does not view a breach of promise by a government on a pension as seriously as it would react to a breach of promise on a financial instrument. This is just a societal convention. The reason for the differences in treatment between the two contracts is probably best explored by anthropologists, not economists. Nonetheless, it is clear to us that in most industrialized countries, presently promised pensions cannot possibly be met.

Why can the promises not be met? The reason is quite straightforward. Meeting all present pension promises implies a drain on the economies of the developed world, and in particular on the respective public sectors, that would make the burden intolerable.

The best way to measure this burden is to estimate the net present value of presently constituted pension schemes. If we use the worst case scenarios as prepared by the OECD several years ago, we find that the implied debt burdens created by these public sector pension schemes, when added to existing debt levels, for a number of countries reaches very, very high levels. The U.S., 115 percent of GDP; U.K., 144; France, 193 percent; Italy, 241; Germany, 247; Japan, 339 percent of GDP.

As these numbers indicate, the implied debt burdens are, for the most part, unsustainable. Our conclusion is that the pensions will be cut drastically in most of these countries. The U.S. does not look quite as bad, basically because we have somewhat better demographics and we also provide less-generous pension schemes. In general, however, it is only a question of when and by how much most of these pension programs will be cut.

To prepare for the upcoming demographic transition, most countries have been trying to improve their fundamental fiscal position to at least accommodate some of the cost of the increases in future pension claims. Therefore, it is not surprising to see that most developed countries have tried to rein in their public sector debt with varying degrees of success.

Despite the numbers noted above, which capture net present values, there are different trajectories for the implied debt build-up among the various countries, depending upon the individual country's demographics. For instance, almost all developed countries have very low birth rates. What usually distinguishes one country from another demographically is the rate of immigration. Those countries with significant immigration have a longer time horizon over which to deal with the debt burden. Countries with traditionally low levels of immigration, for instance, Italy and Japan, will simply age more rapidly than most of the other major developed countries.

In the case of Italy, the public sector has begun to slowly reduce the country's relative debt burden. In fact, despite a history of public sector profligacy, some analysts estimate that even the Italian government will soon move to fiscal surplus. A better fiscal balance combined with recent increases in immigration to Italy means that the pension problem is still serious, but slightly less critical than in the other developed country with a very rapidly aging population, Japan.

Japan could not be having this demographic transition at a worse time. As you may know, the Japanese economy has been underperforming for the last ten years. To deal with weak economic activity, the government has been using fiscal stimulus to try to jump-start the economy. Every time the government injects funds, economic activity improves. However, as soon as it reduces the stimulus, the economy once again shows signs of weakness, thereby requiring further stimulus.

This has now been going on for so long that the government has now built up an enormous public sector debt. The government's debt to GDP ratio is about 130 percent, a number we have not seen in an industrialized country since before World War II. According to both the IMF and the OECD, that number will easily reach 150 percent of GDP in Japan over the next few years. Others estimate that the debt burden could go even higher.

Now that the debt burden is so high, the country is also facing a situation where its pension system will start going into sizeable deficit by mid-decade. By the end of the decade, according to the government's own estimates, the cumulative shortfall will be enormous. This means that if the country is to stabilize its debt, even sharper cuts will be needed in other non-pension-related areas.

It would seem obvious that the pension system needs urgent reform in Japan. In fact, the government recently made some reforms in the system, but these reforms only affect benefits far out into the future. There are important reasons why the government is reluctant to reform the pension system quickly that are centered more on economics than politics.

Since consumption is quite weak at present in Japan, if benefits are cut immediately, then consumption by seniors will decline. If contributions are raised, since contributions are similar in effect to a tax increase, the government fears that higher Social Security taxes might force the economy into another downturn. This is the basic pension conundrum. Beyond this, however, the general pension problem combined with the country's demographics and structure of the labor market are further complicating the economic problem.

The pension problem is well known and widely discussed in Japan. The average person knows that contributions will eventually rise and benefits will be cut. What is the reaction of a rational person in this type of situation? Save more money. Since interest rates have been kept artificially low, that means the return on pension savings as well as on retirement savings of the working population is also quite low. In addition, many Japanese have lost a great deal of money in the stock market since the 1980s. A low rate of return implies that to maintain spending levels in the future,

one needs even more savings, not something that is helpful for the economy.

Worse still is the fact that the Japanese economy needs additional economic restructuring. Restructuring is another term for layoffs. The problem is that if a worker who is in his 40s or 50s loses his job, it is extremely unlikely that he or she would find a comparable job. That means that they know that if there is a great threat to their job over time, then they should save as much as possible now.

All these factors are adding to the overall economic malaise. All in all, Japan faces some of the most complicated fiscal and financial and pension problems of any country in the world. Japan probably represents the best example of why it is necessary for governments to maintain reasonable fiscal policies and also to maintain pension systems that are as actuarially sound as possible. If the problem in Japan is not solved before the end of this decade, we might find that the Japanese economy will look quite different than it has in the past. Thank you for your attention.

[The prepared statement follows:]

**Statement of Vincent J. Truglia, Managing Director and Co-Head,  
Sovereign Risk Unit, Moody's Investors Service, New York, New York**

At Moody's we spend a great deal of time studying the issue of pension burdens for countries around the world. It is clear to us that rapidly aging populations in the industrialized world, as well as in certain emerging market countries, will pose some complicated economic and financial problems going forward. First, when examining the various industrialized countries, what we have concluded at Moody's is that almost every country will "default" on its pensions. What do I mean? When we talk about default on a financial obligation, basically what we are saying is that the obligor does not meet the original terms of the contract. In some way the contract is broken. When we look at present pension promises, it is clear that the promises various governments are making to their people will not be met according to the present terms of the implied contract. At the same time, we believe that the public does not view a breach of promise by a government on a pension as seriously as it would react to a breach of promise on a financial instrument. That is just a societal convention. The reason for the differences in treatment between the two contracts is probably best explored by anthropologists, not economists. Nonetheless, it is clear to us that in most industrialized countries presently promised pensions can not possibly be met.

Why can't the promises be met? The reason is quite straightforward. Meeting all present pension promises implies a drain on the economies of the developed world, and in particular on the respective public sectors that would make the burden intolerable.

The best way to measure this burden is to estimate the net present value of presently constituted pension schemes. If we use worst case scenarios as prepared by the OECD several years ago, we find that the implied debt burdens created by these public sector pension schemes for a number of countries reach very high levels.

Implied Debt Burdens/GDP by 2030

US .....	115%
UK .....	144%
France .....	193%
Italy .....	241%
Germany .....	247%
Japan .....	339%

As these numbers indicate, the implied debt burdens are for the most part unsustainable. Our conclusion is that the pensions will be cut drastically in most of these countries—the US doesn't look quite as bad; basically we have somewhat better demographics and we also provide less generous pension promises. In gen-

eral, however, it is only a question of when and by how much most of these pension programs will be cut.

To prepare for the upcoming demographic transition, most countries have been trying to improve their fundamental fiscal position to at least accommodate some of the cost of increases in future pension claims. Therefore, it is not surprising to see that most developed countries have tried to rein in their public sector debt, with varying degrees of success. Despite the numbers noted above, which capture net present values, there are different trajectories for the implied debt build-up among the various countries depending upon the individual country's demographics. For instance, almost all developed countries have very low birth rates. What usually distinguishes one country from another demographically is the rate of immigration. Those countries with significant immigration have a longer time horizon over which to deal with the debt burden. Countries with traditionally low levels of immigration, for instance Italy and Japan, will simply age more rapidly than most of the other major developed countries.

In the case of Italy, the public sector has begun to slowly reduce the country's relative debt burden. In fact, despite a history of public sector profligacy, some analysts estimate that even the Italian government will soon move to fiscal surplus. A better fiscal balance combined with recent increases in immigration to Italy mean that the pension problem is still serious but slightly less critical than in the other developed country with a very rapidly aging population—Japan.

Japan could not be having this demographic transition at a worse time. As you may know, the Japanese economy has been under-performing for the last ten years. To deal with weak economic activity, the government has been using fiscal stimulus to try to jump-start the economy. Every time the government injects funds, economic activity improves. However, as soon as it reduces the stimulus, the economy once again shows signs of weakness, thereby requiring further stimulus. This has now been going on for so long that the government has now built up an enormous public sector debt. The government's debt/GDP ratio is around 130 percent, a number we haven't seen in an industrialized country since before World War II. According to both the IMF and OECD that number will easily reach 150 percent of GDP in Japan over the next few years. Others estimate the debt burden could go even higher.

Now that the debt burden is so high, the country is also facing a situation where its pension system will start going into sizable deficit by mid-decade. By the end of the decade, according to the government's own estimates, the cumulative shortfall will be enormous. This means that if the country is to stabilize its debt, even sharper cuts will be needed in other non-pension-related areas. It would seem obvious that the pension system needs urgent reform in Japan. In fact the government recently made some reforms in the system, but these reforms only effect benefits far out into the future. There are important reasons why the government is reluctant to reform the system quickly that are centered more on economics than politics.

Since consumption is quite weak at present in Japan, if benefits are cut immediately, then consumption by seniors will decline. If contributions are raised, since contributions are similar in effect to a tax increase, the government fears that higher social security taxes might force the economy into another downturn. This is the basic pension conundrum. Beyond this, however, the general pension problem combined with the country's demographics and the structure of the labor market are further complicating the economic problem.

The pension problem is well known and widely discussed in Japan. The average person knows that contributions will eventually rise and benefits will be cut. What is the reaction of a rational person in this type of situation?—Save more money. Since interest rates have been kept artificially low, that means that returns on pensioner savings as well as on retirement savings of the working population is also quite low. In addition, many Japanese have lost a great deal of money in the stock market since the 1980s. A low rate of return implies that to maintain spending levels in the future one needs even more savings—not something that is helpful for the economy. Worse still is the fact that the Japanese economy needs additional economic restructuring. Restructuring is another term for layoffs. The problem is that if a worker who is in his 40s or 50s loses his job, it is extremely unlikely that he or she would find a comparable job. That means that they know that if there is a threat to their job over time, then they should save as much as possible now. All these factors are adding to the overall economic malaise. All in all, Japan faces some of the most complicated fiscal and pension problems of any country in the world. Japan probably represents the best example of why it is necessary for governments to maintain reasonable fiscal policies and also to maintain pension systems that are as actuarially sound as possible. If the problem in Japan is not solved before the end of this decade, we might find that Japanese economy will look quite different than it has in the past.

Thank you for your attention.

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Mr. MCCREERY. Thank you, Mr. Truglia. I am not an economist. I am a lawyer, and so much of what you have said is not settling real well. For example, Dr. Hale, explain to me how we can have wealth without savings. That was what you said. You said we have wealth without savings, so explain that to me, how we create wealth without savings.

Dr. HALE. The household savings rate is basically a residual of what is left after we subtract consumption from income, and in recent quarters, consumption has exceeded income and, hence, the savings rate has turned negative. But the value of the portfolios of existing assets have increased dramatically because of the very good performance of the stock market.

One number we can quantify easily is pension fund assets. We record that very carefully every day, every month, every year, and the assets now are worth about \$13 trillion. In 1990, they were worth about \$3 trillion. Mutual fund assets now are \$7.5 trillion. A decade ago, they were a third of that, and 20 years ago, they were a few hundred billion dollars. The total capitalization of the United States stock market is today about \$16 trillion. In 1990, it was \$3 to \$4 trillion.

So all of this is a proxy for wealth creation. We have also had gains in house prices and other things, but there is no doubt the central driving force for wealth creation in recent years has been this very dramatic appreciation in share prices and the value of stock market capitalization.

Mr. MCCREERY. So I guess what you are saying is that the value of a family's equities does not count as savings.

Dr. HALE. Under the conventional definitions that we use in our national income accounts, that is correct. Moreover, we have the problem that in computing our national income, we subtract from income tax payments made on capital gains, despite the fact we do not include in our estimates of income the value of these capital gains. So we have some accounting anomalies.

The bottom line is the savings rate, therefore, is in my opinion not as meaningful a number as it might have been ten or 20 years ago. Our savings rate is low compared to the rest of the world, but there is no doubt that our wealth creation has been quite spectacular.

The problem, I think, in policy terms is very simple. Half the population does not own any stocks, does not have a private retirement plan or a pension plan, and is not saving either, and that is where I think there is a policy challenge. We have got to get these people somehow into the wealth creation process or they are going to confront a big decline in living standards when they reach the age of retirement.

Mr. MCCREERY. So is the traditional definition of savings losing importance? Is it something that we should perhaps revise rather than continually throwing out this almost hackneyed phrase now, oh, the savings rate is too low and the United States' savings rate

is so low compared with Japan and other countries. So what? If we are creating wealth, which to a normal non-economist—

Dr. HALE. Right.

Mr. MCCRERY.—sounds like savings, feels like savings, perhaps we should revise this definition.

Dr. HALE. There is no doubt that the savings rate has been a much abused concept, and over the years, various factions or various groups have found it convenient to point to the savings rate as a rationalization for some policy agenda, be it to promote new kinds of retirement savings with tax allowances or simply be critical of our economic performance. Fifteen years ago, our great concern was the budget deficit. That has gone away. Now we are confronting a \$4 trillion budget surplus. The other side of that now is this very low private savings rate.

But if I had to pick the one area of vulnerability from all this, it is that America is now running a very large current account deficit. It will be in the year ahead possibly five percent of GDP. That is, in my opinion, not a problem by itself, because the counterpart to this has been a tremendous demand on the part of the global economy for American assets—stocks, bonds, FDI year. But it is a potential vulnerability in the sense that if we ever had an interruption of those capital flows, a suspension of those capital flows, it would set the stage for a much weaker dollar, for higher interest rates, and possibly a stock market correction.

So we must be sensitive to how big this imbalance grows. If you talk to senior officials like Alan Greenspan, for example, of the Federal Reserve Board, they will tell you that on a three-to five-year view, there has to be a point when these capital flows could slow down because we might have greater growth elsewhere in the world or some other interruption. And when that happens, we could have an unpleasant, potentially nasty adjustment in our financial markets. But it is not guaranteed to happen. It is simply one of these things that could happen because of a convergence of circumstances. We are rolling the dice, and so far, the dice are going our way, but there may be a moment when the outcomes change.

Mr. MCCRERY. I got here a little late so I did not hear the first couple of presentations, and you may have covered this, and I think maybe Dr. Hale may have alluded to this, but what happens to our stock market when baby boomers start to redeem their stocks, so to speak, to finance their lifestyle in retirement? Have you all looked at that?

Dr. HALE. I will tell you that from the perspective of Wall Street people, this is the great unknown question, and only now are academics and even Wall Street pundits beginning to write about it. There are two or three academics in this country with the National Bureau of Economic Research, at Stanford and elsewhere who are starting to write about it. But the area is very unexplored.

All we can do right now is speculate, and as my testimony indicates, you can clearly construct potentially negative high-risk scenarios, but they are not going to happen automatically. They will depend on lots of other circumstances. How much retirement savings is there elsewhere in the world as we run down ours? Where will that money go? What will be the performance of our produc-

tivity in five or ten years? If we could keep sustaining high levels of productivity and profit growth, the rest of the world may have so much demand for American assets it will not matter if the baby boomers are selling it. There are just so many different factors.

We learned, I think, in the 1990s that you cannot predict the economy solely on the basis of demography. If you go back ten years ago, Wall Street was awash with newsletters saying, the savings rate in the 1990s will go to ten percent because of the aging of the population. Not a single pundit anywhere predicted it would go to zero. Why? Because they could not imagine in 1990 the tremendous gains we have had in recent years in productivity, in corporate profitability, and economic growth, which have given us this spectacular stock market boom.

By definition, the stock market is a place where many different factors converge, but there is no doubt if we go out 15 years this issue of baby boomers selling equities is a potential risk. There is the danger that it could be destabilizing and all we can do is try and develop shock absorbers to cope with it.

Mr. MCCRERY. I want to ask one more question and then I will turn it over to my colleagues. You, I think, Mr. Truglia, mentioned that foreigners held 40 percent of the United States—or was it Dr. Hale—debt, publicly held debt. So as we reduce our publicly held debt, and some are promoting that we extinguish our publicly held debt by 2012 or 2013, what effect will that have on our stock market? Will foreigners shift their money from government securities to equities in the United States?

Dr. HALE. This is, again, one of the great unknowns. I had a conversation just last week at Jackson Hole, Wyoming, with Alan Greenspan about this topic and I said to him, “Are you not concerned that the disappearance of the U.S. Federal debt market will undermine the dollar’s status as the global reserve currency,” because right now, foreign central banks own over \$1 trillion of U.S. Government securities as part of our global currency role. And his answer was, “They can buy corporate debt.” Maybe they will buy Fannie Mae debt or Ginnie Mae debt. Right now, the government is talking about constraining the growth of Ginnie Mae and Fannie Mae. Perhaps we will have to expand it to replace the Treasury debt market.

There are examples in history of central banks owning private securities—railway bonds, corporate bonds—and this is, again, a question we will be addressing over the next ten years. But there is no doubt that we could have some substitution. I think that central banks could, if they wanted to, own very high grade corporate bonds and very high grade agency bonds. I doubt that foreign central banks would want to own U.S. equities. It would have been a great investment, but it is contrary to the mandate of central banks normally to speculate in equities. The outlier would, of course, be two years ago, Hong Kong, which had its central bank buy \$20 billion of equities to fight off the New York hedge funds, but that is a very unusual policy. Most of the time, central banks want to be short maturity instruments, two or three years, just to have liquidity.

Mr. MCCRERY. Thank you.

Mr. Hayworth?

Mr. HAYWORTH. Thank you, Mr. Chairman. To the distinguished panel, thank you and good morning. Apologies are in order. One of the challenges of serving in Congress, and I am certainly not an advocate of cloning, but quite often we need to be in three places at once and that is a physical impossibility as we address this fiscal impossibility that may be confronting us now.

Dr. Hale, you just mentioned examples in history. As I was sitting here listening to some of the testimony, I am reminded of, I believe it was Mark Twain's observation that history does not repeat itself, but it rhymes. And yet to peruse Mr. Wattenberg's testimony about the birth dearth and the Japanese demographers extrapolating that there will be an identifiable final Japanese birth, it seems we are heading into great times of uncertainty, which by its very definition can lead to challenges economically, and I will use that terminology rather than other descriptions that might be less than encouraging to the markets and observers as a whole.

Let us return to the question of other economies, other situations. Japan, in a situation—I believe, Mr. Truglia, you mentioned in terms of the drain on their gross domestic product, 339 percent could be their implied debt burden to carry out the pension funding. They are in a horrible situation. Dr. Hale, you mentioned it, as well.

I guess I will address the question to both of you. Mr. Truglia, you might want to start. What lessons do we take from the Japanese situation as we are making the transition in American policy over this next decade? What should we keep uppermost in our minds?

Mr. TRUGLIA. In terms of Japan, one of the reasons I use those numbers, they are worst case scenarios that were done by the OECD and it is important to keep in mind that when you are talking about looking at some projections, they are so patently ridiculous that they cannot possibly ever occur in reality. We have actually looked into the history of how high a debt burden could possibly be sustained.

What is the ultimate level we have actually seen in history? You have to go to the pre-World War II period to find it and we found that Britain for decades lived with a debt to GDP of about 170 percent of GDP. France hit 185 percent after World War I. Germany, it is hard to measure GDP after World War I, but if you compare it with national product—again, these were all academic estimates—it probably was also at about 180 to 190 percent of GDP.

The key question, once you start to get to those debt to GDP burdens is that the society has to make a choice as to who is going to bear the burden. Japan is headed in that direction because of pensions, but for a whole lot of other reasons, too, and the question then is, if they do reach that 170, 180 percent debt to GDP, they are going to have to choose who suffers.

And in the case of the U.K., in the 1920s and 1930s, what they did was they decided to give creditors a preferred status. So if you held gilts throughout the 1920s and 1930s, you did very, very well. The government also had to run government budget surpluses to keep everything stable. But what that did was that destroyed the economy slowly, eating away at its fundamental structure, and that is one of the reasons Keynes wrote his book in the 1930s was to

try and counteract this bizarre fiscal policy of deflation deindustrializing the country and paying very high real interest rates at the same time.

The French after World War I thought that they could possibly have the Germans pay all their war debt through reparations. Well, by the mid-1920s, they knew this was not going to occur and they were very lucky that they happened to have a conservative government elected in 1926 which decided it was going to make the workers bear the burden. And so French industry, after the working wages were driven down in real terms, French industry flourished.

Germany, however, could not decide who was going to bear the burden, could not decide, and basically what you have under that kind of a situation is the economy went into hyperinflation.

The Italians had a somewhat similar problem. Their debt was not as high, the maturity was very bad, and they just decided to default on the debt, and the biggest problem for Italy since then has been that the actual default and rescheduling was so successful that it has always been a viable option in Italian academic circles. Oh, if we cannot pay our debt, we will just reschedule it.

So the problem you have in Japan is we are approaching those very, very high debt levels. What choices will that society have to make? And the problem is, it is such a consensual society, it is difficult to see who they would decide upon as bearing the burden of the debt, because it is not a transfer ever intergenerationally, as most academics refer to it. It is a political choice made in that generation as to who is going to bear the burden.

So Japan's problem is so enormous and because they cannot make a choice as to who is going to suffer—even now they cannot make a choice as to who is going to bear the burden of restructuring—that the longer they wait, the worse the problem is going to be, and the closer they get to that 170, 180 percent debt to GDP ratio means that that problem is going to confront them sooner rather than later and hope to the world that the JGB market can handle it.

Mr. MCCREERY. Thank you very much.

Mr. Collins?

Mr. COLLINS. Thank you, Mr. Chairman.

Dr. Hale, I want to go back to Mr. McCrery's comment about wealth does not necessarily have to include savings. It kind of reinforces an old saying that I have always had. I have been accused by challengers and others about being a millionaire. Well, I have always figured there were two ways to be a millionaire. You could have one or you could owe a million. You had to have some assets to owe a million. You might not have had a dime in the bank.

Fifty percent of our population has no savings and no stock. I think a lot of that comes from government itself, through the fact that we have five marginal tax rates for the purpose of bringing funds in to cover entitlement programs that have been established by the Congress over the years, many that are facing deficit funding in years to come. It has also been the high marginal rates come from the standpoint that we bring a lot of funds into this town and transfer them back out to others. One particular program is the Earned Income Tax Credit.

Also, I think it reinforces, too, Alan Greenspan's comment here last year before the committee when he addressed the Social Security issue. He said, if you are ever going to solve the Social Security problem, you have to end the pay-as-you-go system. There are people today who are talking about programs and proposals that would do exactly that. However, it would not affect the current beneficiaries of Social Security and probably would not even affect my generation, which I am part of the World War II baby boom generation. But it would change and set up in place a retirement system for the generations behind us, which would end the pay-as-you-go system in about 30 to 40 years.

Mr. Greenspan also advised us last year that we ought to look at capital gains rates so that we can encourage people to invest and divest of assets. You do not usually sell something unless you have a gain to it, so you would have a tax liability. He cautioned us to look at the marginal rates. In 1993, prior to the Clinton-Gore, the one that Mr. Gore cast the deciding vote over when he was in the Senate, we only had four rates. Now we have five marginal rates.

We also hear a lot from Treasury and we have heard a lot from witnesses over the last five or six years about the alternative minimum tax and how it is going to be affecting more middle-income folks. All of those things need to be looked at.

I have always had a suspicion when it came to the Medicare program that was created in 1965, it was something similar to what you talked about in some other countries with the pension programs. We had a lot of heavy hitters in this country, large corporations who had established benefit programs that included long-term health care for their retirees.

Mr. MCCRERY. Mr. Collins, we have about two minutes left to vote.

Mr. COLLINS. Okay. But I believe one of the reasons that Medicare program was passed was to change that health care promise from being primary care to being supplemental to Medicare. It saved tons of money for a lot of people and put it on the backs of taxpayers.

And also, you mentioned the market sell-off by the baby boomers. Somebody has to buy when somebody sells. Thank you.

Mr. MCCRERY. Would the panel indulge us for just a couple minutes to run across the street and vote and come back. Can you stay for a few more minutes? Thank you. We will be right back.

[Recess.]

Chairman SHAW. [presiding.] I would say to the panel that usually when we have a vote called and we go that close to the end of a hearing, we terminate the hearing. Despite the low attendance that we have at this hearing, I can tell you that you have certainly gotten the attention of those of us who are here. In fact, I was just talking to Kim, our staff person, Kim Hildred. We need more of these types of hearings. This is some scary stuff.

When I left here, when I broke and left the hearing for a few minutes and went over to the front of the Capitol, there was a news conference and one of the subjects was the retirement of the national debt. This, and I think Mr. Truglia, you spoke about this, and I heard you speaking about this when I returned and talking

about Japan and this type of thing. This is just a disaster, a global disaster waiting to happen.

One of you has spoken on the impact of the fact that birth rates are going up in some of the developing countries. The huge question is whether they can sustain that population growth. How would you speculate, and I know there is no real model that I am aware of that you can judge from, but how would you predict what that is going to do to a shift in global powers, a shift of centers of population, centers of wealth? I am looking for a volunteer. I am not going to call on any one of you. Yes, sir, Mr. Wattenberg? By the way, I used your statistics out there. I hope they are right.

Mr. WATTENBERG. Excuse me?

Chairman SHAW. I said, I used your statistics at that news conference a few minutes ago. I hope they are right.

Mr. WATTENBERG. I hope I am right, too. The birth rates and the fertility rates in the less developed countries are also coming down remarkably rapidly. People keep saying, well, the third world is growing and growing and growing, but they are growing because of what demographers call the momentum effect. The mothers today were born in periods of high fertility so you have lots and lots of mothers. But the actual fertility rates, the birth rates in the less developed countries are falling not only rapidly, but more rapidly, as a rate, than had happened in Europe and in the United States. Just about 35 years ago, the total fertility rate in the less developed countries was a little bit over six children per woman and now it is a little below three. So this changes the whole dynamic.

First of all, these less developed countries are going to have the same problems that we are having just a generation or two later because there is going to be this imbalance between elderly people and working age people. So the way I see it, this is going to be a global rolling problem. It is just a wholly new situation: people are not, or will not be reproducing themselves in the numbers needed to keep population from falling.

Chairman SHAW. Do you have the information broken down per continent? What would be the breakdown per continent?

Mr. WATTENBERG. Oh, per continent?

Chairman SHAW. Africa, South America—

Mr. WATTENBERG. Well, you will have a shift, obviously, from—I mean, there is a scenario that has Europe becoming sort of a continent of a little pretty picture postcard kind of place with ever-diminishing population. The demographer Samuel Preston has estimated that even if European fertility rates went up to 2.1 children tomorrow, or nine months from now, which is not going to happen seeing as they have been falling and falling and falling, you would still have a 25 percent decrease in total European population by the middle of the century.

So the balance, the geopolitical balance is moving from Europe surely toward Asia even though China is already below replacement, North and South Korea are below replacement, Taiwan is below replacement, and Thailand is below replacement. All the countries are coming down, but as a differential rate from different gases.

The answer to your question is that power will be moving from the Western world to the non-Western world, or population as a proportion of total population will be moving from the Western industrial world to what we now know or think of as the non-Western, non-industrial world.

I wanted to make just one other comment, which is on all the gloomy scenarios, which I partly share. Because of the nature of this split demography, where the fertility rates in the third world are coming down but from a much higher base, we are still going to have in the course of the next 50 years an additional two billion more people. We are going to grow from about six billion people to eight billion as a global totality. And moreover, a lot of the people who are now living in less developed countries are moving to the cities, getting better educated, spending more money, moving into the middle class. So I think the amount of turbulence coming at us is major, but the amount of demand is not necessarily going to come down for quite a while.

Chairman SHAW. Could you continue that scenario through the other continents?

Mr. WATTENBERG. Until recently, it was said that Africa was the last holdout, that the fertility rates had not come down, but in the last 15 or 20 years or so, and this is even preceding the catastrophe of AIDS, we began to see fertility rates falling substantially in many of the African nations. So that was sort of the last holdout. Fertility rates had fallen everywhere except Africa, and now they are falling very rapidly. I mean, the basket case scenario was always Kenya. They had a fertility rate of eight children per woman. It is now down to four-point-something. So these rates are falling very, very rapidly.

The other notion was that the Muslim countries would not fall because of religious restrictions and you are seeing reductions in fertility rates, some of them quite dramatic. I mean, the Egyptian rate is down. The Tunisian rate is down close to replacement level already. There is a falling birth rate in both Iran and Iraq. We have some data in from certain cities in Iraq. In Shiraz, it is below replacement rate already.

So it is as if somebody put something in the global drinking water supply. It is happening everywhere. The Latin American countries are coming down substantially. The Mexican birth rate 35 years ago was 6.5. It is now down to about 2.5 children per woman. So this whole idea that America is going to be flooded with Mexican immigrants is going to be very interesting because that is not going to leave any people in Mexico.

The Asian countries are sort of split. The developed countries have already come down below replacement, and that includes China for some very unfortunate coercive reasons, but it is still below the replacement rate. The Indian rate has come down very sharply, from, again, about six children to about three children. Bangladesh, which was the other great basket case nation, fell from six children per woman to three children per woman in one decade, which is just absolutely unheard of.

And then you have the phenomenon of Eastern Europe and the former Soviet republics and no one knows whether that is just the normal, just in a similar pattern with all the other countries or be-

cause of the economic and social chaos that has been going on, particularly in the former republics of the Soviet Union.

The other thing is that people have argued that when income goes up, fertility goes down because people live in cities and live in apartments and whatever, and simultaneously, they have argued that when income goes down, because there is not a lot of money to support children, then fertility goes down. So you have a situation that when income goes up, fertility goes down, and when income goes down, fertility goes down, which leads one to the conclusion that fertility is going down, having exhausted the other possibilities.

Chairman SHAW. What is the presence of birth control, the technology? How much of that is having to do with this all from a global perspective?

Mr. WATTENBERG. Well, it is a—

Chairman SHAW. Now in Africa, I would assume that probably they do not use much birth control, that there is something else going on.

Mr. WATTENBERG. They are using more and more, and this is the contraceptive revolution has spread throughout the world and the population groups maintain that it is because of the U.N. programs that so much of this fertility decline has happened. I am a little skeptical myself; I support those things, but the rates have come down in countries that have not had specific national programs.

So the basic cause of this birth dearth is broader than just contraception. It is modernism. It is a combination of contraception, legal abortion, education of women, moving from farm to city, high technology, advent of television, modern communications. You can just go on and on, and as I say, the demographers all along understood this demographic transition from high fertility to low fertility, but they always assumed that it would sort of level off at this nice pleasant rate of 2.1 and it just went through it like a hot knife through butter and you have these 60 countries already that are way below replacement level fertility with no particular sign that it is going to come back up.

Now, obviously, sooner or later, it has got to come back up because, as I said, otherwise there are not going to be any people around, but it is going to be a very different world.

Chairman SHAW. You also mentioned religion as it applies to the Arab countries. Your lowest replacement is Spain, which is a Catholic country.

Mr. WATTENBERG. The Catholic countries of Southern Europe are very low. Greece is very low. It seems to now be beyond religion. You have Catholics in the United States having the same birth rate as Protestants. There is not any difference.

Chairman SHAW. Someone else wanted to chime in here, and I would welcome the three members sitting here, that we sort of have a free flow here and anyone can come in at any time. Yes?

Mr. HEWITT. Just to add to some of these remarks, on the geopolitical consequences, I think they will be significant. If you look at China, for example, by mid-decade, they could have 400 million over 65, and if they rigorously enforce their one-child policy, the elderly will be 40 percent of their population. In fact, half of the Chi-

nese population at that point would be over 60 and at that point China will also be at risk for aging recessions.

Chairman SHAW. When was that?

Mr. HEWITT. Pardon me?

Chairman SHAW. What date was that you gave us?

Mr. HEWITT. Mid-century, 2050. Then, there is the population explosion in other regions. I agree with Ben, birth rates are coming down everywhere, but they are coming down more slowly in some countries than in others. Take the Middle East. In Saudi Arabia, the average age is 16, and it is close to that in Iraq and Iran, and other Gulf States. That means that their populations will more or less double in the next 20 years. In many cases, for example, Saudi Arabia, you have a situation where they are already importing food and desalinizing water. Governments in these countries are not democratic, and they tend to blame outside influences for their problems.

Juxtapose this with the fact that our ability to deter or resolve crises in the Middle East is going to decline dramatically because America has an aging problem in its own military. All of the equipment we bought during the Cold War is wearing out. And by 2010, if we continue on the current budget baseline, our armed forces will be half their current size. We know from Kosovo that Europe no longer has a first-rate defense.

And so just as we become more dependent on economic growth than we have ever been, because otherwise we cannot pay the pension costs, we are going to become more vulnerable, not simply because we cannot deter conflicts, but because the nature of our defense obligation has changed. We are no longer defending borders. We are going to have to defend our growth rates if we want to have Social Security.

Mr. MCCRERY. Mr. Chairman?

Chairman SHAW. Yes, go ahead.

Mr. MCCRERY. Dr. Orszag, in looking at your bio here, you have a Ph.D. in economics and you teach macroeconomics. I understand that the impact you all are talking about primarily today is on our pension systems and so forth and the difficulty we are going to have in paying those debts with the lower population growth, but can you tell me any salutary effects of what is happening with respect to the birth rate? Are there any?

Dr. ORSZAG. There are some potential positive effects from slower population growth. In particular, this might seem a little theoretical, but—

Mr. MCCRERY. All of this seems pretty theoretical.

[Laughter.]

Dr. ORSZAG. Okay, but that is a caveat. Slower population growth will affect, under most models, will affect the amount of capital that we have per worker. So intuitively, the slower the population growth, everything else equal, the more capital that we have per worker, which could raise income per worker, or output per worker. That is a potential benefit.

Now, there may be a mismatch between that positive effect and paying for the pensions that has to occur. Just because income per capita goes up does not mean that the pension system is made whole. Nonetheless, there are some potential benefits.

If I could just add one other quick comment on China, because I think it is obviously such an important country, there is not only the issue of the population aging, but also, they face particular challenges in pension reform. I was in Beijing a month ago and we met with the premier to talk about social security reform. A lot of the existing pensions are on the books of the State-owned enterprises. The pensions had been provided by the old State-run system. Now, obviously, as they are moving to a market economy, you do not want to have the pensions stuck there on the State-run enterprises.

So they face a particularly large challenge in trying to deal not only with the population aging that is faced by lots of other countries but in shifting pensions basically from one sector to another. So I think that that transformation is worthy of our attention because it has geopolitical ramifications—basically, the pension system in China is an important thing. China is an important country and it will have geopolitical ramifications.

Chairman SHAW. I wish you would go down to Pennsylvania Avenue and talk to our premier.

[Laughter.]

Mr. MCCREERY. Mr. Wattenberg wants to make a comment. Before you do, though, let me just slip in here that that is an interesting thought about China having the problem with pensions from a government pension standpoint as opposed to the United States, which our pension problem is going to be primarily corporate and private. I mean, we have a public obligation, but the private sector in our country provides most of the pension benefits, do they not? So is it not going to be easier for us, assuming that the private sector is better at increasing productivity than the public sector, is it not going to be easier to meet that obligation, given the fact that we are going to have more capital per worker?

Dr. ORSZAG. If I could offer a couple comments—

Mr. MCCREERY. Sure.

Dr. ORSZAG. First, the Social Security system in the United States is fully portable with few exceptions, such as for State and local workers. But basically, you can move jobs and your Social Security benefits follow you. There is not a portability issue. In fact, it is, in a sense, more portable than many private pension plans are.

Mr. MCCREERY. We are trying to fix that.

Dr. ORSZAG. Yes, and actually, one of the benefits of the legislation that the Ways and Means Committee and the Senate Finance Committee have been working on is to improve the portability of pensions across different types of pensions.

The second point is, if you look at current retirees, Social Security is, for the majority of them, the most important source of retirement income, not private pensions. Now, that may change in the future—

Mr. MCCREERY. It is changing, is it not?

Dr. ORSZAG. It is changing and doing projections out into the future is more difficult, but in terms of current retirees, Social Security is by far the most important source of income for the majority of them.

And just a third point that I wanted to get in because it was discussed earlier, as we noted several times in terms of private pensions, only about half of the workforce is covered by private pensions. One thing I just wanted to note is that is very income dependent. The coverage rate for lower-income workers is much lower than for higher-income workers, dramatically lower.

One of the very interesting things is that if you offer lower-income workers the opportunity to participate in a 401(k) plan with a corporate match, they participate at surprisingly high rates. Even at \$10,000 or \$15,000 in income, half of the people who are offered a 401(k) will choose to contribute. Now, the problem is only 20 percent of them are offered in the first place, so only ten percent of them, half of the 20, have a 401(k). But the key thing is, if they are offered the opportunity to have their contributions matched, they contribute at what I consider to be surprisingly high rates and that at least raises the question of this sort of government matching program that Dr. Hale mentioned.

Whether that in some way—and the Senate Finance Committee has something similar, although it is not refundable, so it is not exactly the same, but something similar is in the Senate Finance Committee pension bill. Whether something like that is the most auspicious way of promoting retirement security for that 50 percent of the workforce that does not have a private pension, I think the answer might be that it is.

Dr. HALE. The Investment Company Institute has done surveys of employers and they find that in corporations that offer 401(k) defined contribution plans, 75 percent of the employees take them up but 25 percent decline because they do not want to make any income sacrifice. An interesting question is, should we make this compulsory? In Australia, the Federal Government 10 years ago brought in a compulsory superannuation program for all income with a threshold of \$8,000, and by law, nine percent of all income must be set aside for a compulsory retirement savings program, and this affects the entire population. It is not elective. It is not optional. It is mandatory. The only allowance is really low incomes, a few thousand dollars, are not included because the administration costs are too high.

Just one further interesting fact on China. China does not yet have a private pension fund system, but the Chinese people are moving rapidly to get ready for retirement through development of their stock market. China reintroduced the stock market in 1991. It had been shut down by the communists in 1950. Today, after nine years, China has 80 million retail shareholders, more than the United States, and now they are going to go the next step—

Mr. MCCREERY. How many million did you say?

Dr. HALE. Eighty million, eight-zero. They have taken to the stock market very, very quickly. The market capitalization of China is now approaching \$500 billion, which is half of GDP, and there is also a further couple hundred billion of Chinese companies listed in Hong Kong or offshore investors. In fact, a few of these companies now are listed in New York because the market here is bigger than it is in China.

But the point is, China is now going through a gigantic experiment in resource allocation, including joining the World Trade Or-

ganization, to get ready for retirement. They realize they have got to have the loss-making State companies become successful, profitable capitalist companies. Otherwise, they cannot cope with 400 or 500 million retired people. This is a central driving force.

Mr. WATTENBERG. I just wanted to add one point to your question, sir, about is there a good news side to this. From the environmental point of view, the idea that we are growing less rapidly than before and will stabilize and then probably decline, I think most environmentalists would think that is probably a pretty good idea.

The issue of global warming is one that I find fascinating. In the early 1990s, the U.N. middle series projection was talking about 11.5 billion people before the world stabilized, and in the last ten or so years that has gone down by about 30 percent, from 11.5 billion to about 8.5 billion. Some demographers think it is probably never going to hit eight billion. Insofar as global warming is caused by human beings, which is a dubious proposition or one that has got to be considered, the amount of humans causing the this problem will be diminished by 30 percent. But I have yet to see any global warming population study adjust their figures for population. They are still using that 11.5 billion figure because it is nice. If you have to cut it all by 30 percent, there would be a different situation.

And finally, there is another set of policies that have to be considered, those called "pronatal." How can you over a period of time in a noncoercive way, obviously, make it easier for young people who want to have children to have children, because just looking at it very dispassionately, it is those missing children that are causing the shortfalls in pensions in the out years.

We as a society have made it harder for young people who want to have children to have children. We have piled college loans on them. We have reduced the real value of the tax deductibility for children. The heartening sign, I think, is the advent of the tax credit. Five hundred dollars is not a whole lot of money per child per year, but it is something. Now there is talk, I guess, it is going to go up to \$1,000.

The experience in the European countries has been that pronatalism does not work. On the other hand, nobody knows that because you do not know what would have happened if they did not have the pronatal policies. I mean, there is a lot of theory spinning going on. From my point of view, it would seem to me that \$500 is not going to work, \$1,000 is not going to work, but there is a finite number where it is going to work, I mean, \$5,000, \$50,000. At a half-a-million dollars, I guarantee you it will work.

So there is some tweaking that, at least in this country, that we ought to be looking at the various pieces of social legislation that come down the pike and say, is this making it easier for people who want to have children to be able to have children. Nothing coercive, nothing of any sort like that, but when you go out and talk to young people, as I do when I talk at colleges on this topic and I had these discussions in Europe on some television programs that I have done, many young people say, you know, I would really like to have a second child but we cannot afford it. Now, the fact is that human beings have never been wealthier before in the history of

the planet. They want cars and a house and all those things. But that is something that ought to be considered by the Congress.

Dr. HALE. There is one industrial country which has run contrary to the trends that Ben and I and others outlined a few minutes ago. It has succeeded. It appears to have stabilized its birth rate at replacement level after a decline 15 or 20 years ago, and that country is Sweden. Their birth rate is still remarkably high by the standards of Western Europe. The Japanese government sent a special delegation there a couple of years ago to investigate why, to see if this should be something that the Japanese public policy should imitate, and the bottom line is the Japanese did not like what they saw in Swedish society about the role of women, the role of child care, the role of public spending as a kind of subsidy for various social safety nets. But it is an example we should look at.

I would not endorse all the things I have seen there because they have other consequences for taxation and incentives, but we do have one interesting case study to look at. Other countries around the world are now trying to also have pronatalist policies. You have big new tax allowances in Quebec, because in Quebec the decline in population is a threat to the language, not just to the economy. Singapore now has a policy of government-sponsored courtships. They have love boats for young civil servants to go out and get engaged because their birth rate has also fallen. And other countries are also looking for examples to imitate. But Sweden is a very interesting case study. It might be worth having an expert or two come and speak on the topic here.

Mr. WATTENBERG. Except I have the U.N. book here. Dr. Hale is absolutely right. They did have an uptick, but it has now gone down to about 1.6, is that not right, Paul? Yes. So it is tricky stuff. But you were right for a while.

Mr. TRUGLIA. On the point of the U.S. position, I think when we are looking at the burden of public sector pensions, the U.S. comes out looking relatively good because we are not historically as generous as continental Europe and Japan have been with their systems. So, therefore, the discussion of our pension problem becomes broader and, in fact, more complicated to deal with. From a rating perspective, it is easier, because we are looking at rating of government bonds. So our job is made easier by the low promises made by the government. But in dealing with the problem, it is easier in a certain sense in the continent of Europe and Japan because the decision is very centralized and when they actually come to grips with it, they will probably have a more profound effect quicker.

So, for instance, in the case of Italy, which has terrible demographs and a pay-as-you-go system in place for most workers now, made a reform in the mid-1990s going to a defined contribution scheme for new workers, so once they get over this very long hump, they will actually be in very good shape way down the road. But how do you get from here to there is the question.

Chairman SHAW. I think what I am hearing from every one of you is a pay-as-you-go pension system no longer is sustainable in the Western world.

Mr. TRUGLIA. Certainly not at benefits promised.  
Chairman SHAW. J.D.?

Mr. HAYWORTH. Thank you, Mr. Chairman. So many different permutations and consequences to what we are looking at here today. It almost reminds me of a day in the first grade when they say, the person, place, or thing is a noun, so name a noun, and so you would go home and name about everything.

One element in terms of strategic implications for the United States, I am intrigued by what has been mentioned about Beijing and the policy consequences there in terms of trying to make plans to fund some pension program. Of course, our friends there, though much has been made of market reforms, there is still not strict adherence to the ballot box, is there. There may be popular sentiments, but we saw what transpired at Tiananmen Square.

In terms of securing wealth, the People's Republic of China, does this provide impetus to those within their military-industrial complex who want to have a reunification with Taiwan and the economy there? Is this something that is very much on the minds of the Chinese leaders in the short term? Is there added impetus, then, to expect some Chinese military action to take Taiwan, Mr. Hewitt?

Mr. HEWITT. I get the impression that they are not thinking about demographics as a military policy issue right now. If this is a danger on Taiwan, it would seem to be in the window between now and 2020. Between 2020 and 2030, the elderly portion of China's population will double from 8 to 16 percent, a transition which took 60 years in the United States, or will by 2010 or so.

I can tell you, one of the things we are looking at is what would happen to China's elderly if they did take some aggressive action and the United States and Europe were to shut them out of the global economy for any period of time. I think it would be an absolute disaster.

If you look at the younger people in China, they have a very different character than the older generations. There are entire generations now that have been shaped by 30 years of the so-called one-child policy. In many cases, these youth have no aunts, uncles, brothers, sisters, or cousins. They are only children, and the term for them there is "little emperors." Little emperors are not good spear carriers for socialism or communism.

So these issues all have to be taken into account, and I think that there is a compelling case to be made to the Chinese that if they focus on the goal of prosperity, they really have a much better chance of making it into mid-century without a horrible retirement crisis.

Mr. TRUGLIA. Might I add on China, one of the key problems that they face is a fundamental fiscal problem and that is more medium term and the Chinese are quite aware of this. The size of the central government is actually relatively small compared to the rest of GDP, and so now that they are talking about trying to take on the social safety net that used to be in the State-owned enterprises, they are stuck in this conundrum of how do you increase the take of the central government to try and fund all of these various activities without having the kind of negative effects that you would expect by a government basically increasing or suddenly creating social security contributions which look like a tax increase.

So they are caught in this bind, and what you see if you actually take a look at the Chinese fiscal position, thank goodness for them

that they have capital controls and a relatively closed economy because the domestic fiscal situation is quite dreadful. The only reason it has not had a big effect on the external side is that they have walled off the potential effects of a spillover of profligacy at home on the domestic side. They even count as revenues borrowings that they undertake. Bonds are included in their revenue figures and their overall revenue is still very, very small relative to GDP.

So they really cannot afford to build up a large pension burden without a massive reform of the fiscal situation. The threat to the military over time is somewhat analogous to Russia, that you will then be crowding out their own military needs to try and meet these social needs and how are they going to ever balance these two? We do not know, and in a non-democratic society, it is going to be even more difficult to predict—a massive problem for them purely coming out of the fiscal side.

Dr. ORSZAG. If I could just add a few thoughts, first of all, I agree with the characterization of this as being a very difficult problem in China. I am not sure I agree that policy makers are not very attuned to it. I was struck by—this was an academic conference in Beijing. We probably had six or seven cabinet ministers who came to the conference, which is—it would not happen in the United States. So I think that they are aware of the problem. It is just difficult to deal with.

They had a set of reforms that were put into place a few years ago and one of the critical problems is actually enforcing what is supposed to be happening out in the local areas. The central government just has difficulty making sure that if funds are supposed to be put into accounts, that they are actually put into accounts, which is obviously a different problem than one that we face here. We do not normally have to worry about things like that.

Mr. MCCREERY. While it may be true that six cabinet ministers would not show up in the United States, it is also true that cabinet ministers in the United States do not make policy. The legislative branch does, and that is why we are here today.

I seem to be hearing implicit in your testimony and in your remarks that maybe we should consider converting Social Security from a defined benefit program to a defined contribution program. Is that something that we should consider?

Mr. HEWITT. If I can speak on this, there is no system that is going to be risk-free if the rest of the world does not get its act together. Retirement security here, whether it is 401(k)s or dependency on a government program, will be at risk if other countries export their crises to us. So very much now, more than ever before, Social Security at home requires a strong diplomatic and foreign policy that is focused on these questions.

Chairman SHAW. How would that be transferred to us?

Mr. HEWITT. Well, if the disaster in the making that Mr. Truglia outlined takes place under the worst-case scenario, and there is upheaval in Japan, default or some form of default, hyperinflation and so forth, this, of course, will have a huge effect on our own stock markets.

Chairman SHAW. You are talking about—

Dr. HALE. a global depression.

Dr. ORSZAG. If I could also just respond, I think one thing that maybe we could all agree on is that increased funding of a pension system would be beneficial, that increasing the saving that the pension system is doing, including here in the United States, would be a good thing. How that is done is a different question. I think I may come down on a different side of whether that should be done through getting rid of the defined benefit system and turning it into a defined contribution system or doing it within the defined benefit system. But increasing that funding is critical regardless of where you come out on the defined benefit versus defined contribution debate.

Mr. TRUGLIA. Might I add on the defined benefit versus contribution, that technically solves the government fiscal problem that you have, but it does not necessarily deal totally with the fundamental pension problem. It is not clear. And then you have the problem that you had in Chile in the case of the build-up of their system, that you wind up having society decide that there is a minimum level that everyone has to have to provide a minimum level of social insurance, and what we have seen, though, in recent years is that more and more people are going to take advantage of that, so they are trying to avoid the defined contribution because they know, if they can possibly stay out, they know they can at least get the minimum contribution and try and stay out of the system.

But more importantly, if you take a look at—when you talk about medium and long-term projections, having been in country risk analysis now for too many years, I am afraid, I have seen the long-term economic projections certainly not live up to your initial hopes. And if you were in 1985 and you were projecting what Japan would look like fiscally and economically in the year 2000, I think you would come up with an extraordinarily different picture than the reality. And if you had decided at that time that Japanese stocks were, in fact, probably the thing to have in your retirement accounts, ex post in view of retiring now, you probably would not be a very happy retiree.

So I am just saying that whatever it is, you probably want a combination of all sorts of things, not all your eggs in one basket, try different approaches, at least keep sound fiscal policy so you can deal with an emergency, and just in case something else happens, do not propose anything that is too risky for the society as a whole.

Chairman SHAW. You know, it is interesting. A light bulb just went off in my head in listening to the comments on increased funding. That is precisely what the Archer-Shaw bill does. It increases funding for Social Security. Now, that is something that everybody should support.

Mr. MCCREERY. Well, it increases funding based on the assumptions made by the Archer-Shaw plan, and that is what Mr. Truglia was getting at and I agree with him and I am sure you do, too.

Chairman SHAW. Absolutely.

Mr. MCCREERY. None of us who supported the Archer-Shaw plan said that it would definitely, definitely, definitely work, but based on everything we know and based on the history of our own stock market over 100 years, we think it will. But surely, as Mr. Truglia points out, there is no guarantee, but we do have to take some risk

in public policy occasionally, so I think the Archer-Shaw plan was a very good kind of middle-of-the-road solution to the Social Security problems that we were facing. It does guarantee a minimum benefit and yet it does offer the prospect of getting a higher rate of return for our investment for those payroll taxes, which puts more money, as Dr. Orszag suggested, into the system. So it is a very well-crafted plan that deserves some thought.

Most Republicans, frankly, do not like the Archer-Shaw plan because it is not risky enough. It is not dependent enough on the private sector and individual accounts and risk. But it is worth thinking about in this society as we try to get through this problem.

Dr. Orszag, you are itching to say something.

Dr. ORSZAG. I just wanted to note that, as the chairman obviously knows, the Archer-Shaw plan also involves substantial general revenue transfers.

Mr. MCCRERY. Absolutely.

Dr. ORSZAG. And that is the key to the funding. So those general revenue transfers could be put into the accounts that would be created under Archer-Shaw or could be put into some sort of alternative mechanism, too. But the key to the increased funding is the general revenue transfers.

Mr. MCCRERY. Absolutely. There is no way to get there without a substantial commitment of general revenues. There has got to be a transition from where we are now to where we want to go, and the only way you can finance that is with public revenues or general revenues. We understand that. But you are never going to get there if you do not commit some percentage of general revenues to the problem. So you are exactly right, but so what?

Chairman SHAW. I think one of the things here that I think should be recognized, and I would like to direct this to Mr. Hewitt, the Gore Social Security plan increases national debt to the Social Security Administration. Could you comment on that?

Mr. HEWITT. I think the idea, if I understand the plan, is not to eliminate the national debt, as some say, but rather to shift its ownership from private hands into a public agency, the Old Age Insurance Trust Fund. But the second half of that plan is to reverse those flows at some point. Essentially, the government would borrow the debt back after 2020 when payroll taxes no longer suffice to pay the benefits.

And what I think the message of this panel here today is, that the world in 2020, despite its many uncertainties, is going to be in part driven by these demographic factors. It could be that if Japan and Europe continue to age and retirement patterns continue, that countries which have been supplying the global markets, who we have borrowed from in the past when we have issued a lot of national debt into private hands, will no longer be supplying those markets and we need to even ask ourselves whether even China would be able to absorb that debt given its demographic problems.

The International Monetary Fund and other organizations that have looked at this possibility, and have expressed concern that that kind of an approach, issuing a lot of debt, even if it is simply a trust fund selling back its debt to the private hands, would have an effect on the cost of capital globally. Whether that will be the

case, we do not know, but the conditions are certainly there where it might.

Chairman SHAW. Thank you. Thank you all very much. This has been a fascinating, fascinating hearing. We have our work cut out for us. We have a lot to do to ring those alarm bells across this country.

And again, as I commented at the beginning of the hearing and now I will really underscore, it is really too bad that there is not more press here, that there is not more interest in this hearing. We had a number of inquiries before the hearing and we thought that it would bring attention to this problem. Much of our job is not only to pass laws but also to direct public attention in the direction that it has to be so that there will be the climate to legislate in the areas that really need our attention. This is a disaster in the making and America seems to be sleeping through it. Our job is to wake them up.

Thank you very much. The hearing is adjourned.

[Whereupon, at 12:10 p.m., the hearing was adjourned.]

[Submissions for the record follow:]

**Statement of Hon. Robert T. Matsui, a Representative in Congress from the State of California**

I would like to begin by thanking Chairman Shaw for holding this hearing. All too often, Congress approaches a problem with too narrow a focus and fails to examine the larger ramifications of the issue. Hopefully, with more hearings like this one, we will be able to maintain a broader perspective on the issue of global aging throughout the 107<sup>th</sup> Congress.

I would also like to thank Paul Hewitt and the other representatives of the Center for Strategic and International Studies' Global Aging Initiative (GAI). All of you are here today because of the work you have done to promote a greater awareness of the demographic trends facing industrialized nations. The GAI's research will play a vital role in formulating public policies to respond to population aging both here in the United States and abroad.

Due to improvements in life expectancy and the aging of the Baby Boom generation, the number of people in the United States over age 65 is expected to roughly double between now and 2030 (from approximately 35.5 million in 2000 to 69.1 million in 2030).

Moreover, because of lower fertility rates, people over the age of 65 will comprise an increasingly larger share of the total population in the not-too-distant future. The U.S. Census Bureau projects that the percentage of the population age 65 and older will climb from 12.7 in 2000 to 20.0 percent in 2030. Consequently, as one of our witnesses points out in his written testimony, "today each working individual supports a greater number of old people than before, and the situation is projected to grow more severe over the coming decades."

This situation is certainly not unique to the United States. In fact, these demographic trends, while daunting here at home, pose even greater challenges for other nations. As Dr. Hewitt notes in one of the GAI's publications, Western Europe's median age will rise by 14.8 years over the course of the next 50 years. Japan's median age will rise by 8.9 years, and America's median age will rise by 2.7 years.

For some time, this Subcommittee has been examining how these long-term demographic trends will place increasing strains on public programs for the elderly, such as Social Security. We may be required to find new resources to meet our obligations to our nation's retirees. While we have not yet reached a consensus about a particular response or set of responses to these trends, I think we all agree that we cannot afford to procrastinate in working towards a solution. The United States may be better positioned than many other countries to meet the challenges of an aging population, but that does not mean that we can be complacent. By acting in a timely fashion, any changes that are made to Social Security or any other program for the elderly may be phased in gradually, thus giving individuals more time to respond to these changes.

Although the United States and other industrialized countries face the same type of problem in terms of global aging, I think we can also agree that we should not necessarily pursue the same solution. Reforms adopted in other countries provide

tremendous insight in addressing the challenges created by global aging, but there is no universal cure-all. For instance, while some countries, such as the United Kingdom, have decided to privatize their Social Security programs, such restructuring is neither necessary nor desirable in the United States.

While there is no universal cure-all for global aging, one of the most effective ways to prepare for an aging population is to promote economic growth so that the economy will be better able to handle future demands. Of course, one of the best ways to promote economic growth is to increase national saving by consistently reducing the national debt. I trust that today's witnesses will discuss the role that economic growth can play in easing the strains created by aging populations.

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**Statement of Hon. Fortney Pete Stark, a Representative in Congress from  
the State of California**

**FIRST THING AMERICA MUST DO TO DEAL WITH ITS AGING CRISIS, IS NOT  
GIVE AWAY THE TAX BASE NECESSARY TO FINANCE MEDICARE**

Mr. Chairman, Members of the Committee:

It is important to hold a hearing on the "Global Aging Crisis," so as to better understand the situation facing the global economy in the coming decades.

But it is also a strange hearing to be holding when the Ways and Means Committee reported out, and the House has passed, a bill which eliminates a progressive tax worth \$13.7 trillion over the next 75 years, that would have been used to finance the Medicare system. One shouldn't hold hearings about a crisis in the same calendar quarter in which we helped deepen the crisis.

As the percent of the world's retiree population increases, financing the health care needs of these retirees will be an even more complex and difficult task than ensuring their retirement security.

There are a lot of things that can be done to ensure the future of Medicare: we can cut what we pay providers, we can ask retirees to pay a larger share of the cost of the program, or we can find some new sources of revenue. The only honest answer is that we will have to do all three. There is no magic bullet. Governor George W. Bush's flirtation with Premium Support is not some new magic answer: premium support saves only by forcing seniors into HMOs that save money by denying care and paying providers less.

Since the day will come when we will need additional revenue to pay for Medicare, it is the height of irresponsibility to give away the portion of the Social Security tax on upper income individuals that is dedicated to financing the Medicare hospital trust fund.

If you want to address the global aging crisis, the first thing you do is don't make the situation worse just for the sake of immediate election year rhetoric.

There are other long-term steps that we can take to make Medicare a better and more affordable program for our aging society: I urge Members to look at the hospice and end-of-life improvement provisions in HR 2691 and at the long-term coordination of the care of the chronically ill in HR 4981.

While there may be a global crisis, it is worth remembering that we can solve this problem. As the GAO recently reported, between 2000 and 2020, all Federal mandatory spending on the elderly and retirees will climb from 6 percent of GDP today to 8.4 percent. A lot of money? Yes. Manageable? Yes.

It is interesting to note that two societies whose population is as old today as ours will be in 2020—Germany and Japan<sup>2</sup>—have in the last several years enacted (during a period when their economies were relatively weak) national social insurance plans to provide long-term care for all of their citizens. In Germany, they voted a 1.7 percent payroll tax, split between employers and employees.<sup>3</sup> The Japanese

<sup>2</sup>Today the percent 65 and older is 12.5, 17.1, and 16.4 respectively in the USA, Japan, and Germany. In 2020, it will be 16.6, 26.2, and 21.6 respectively. *Health Affairs*, May/June 2000, p. 192.

<sup>3</sup>Americans' unwillingness to pay taxes for social programs contrasts with the German view: "it is thought to be a relatively modest premium when compared with the average of 39.6 percent of income that is already paid for health, pension, and unemployment benefits." *Ibid.*, p. 10.

voted a 0.9 percent salary tax on everyone over age 40 to start a new \$43 billion a year long-term care program.<sup>4</sup>

I would hope, Mr. Chairman, that in the future, the Ways and Means Committee could look in detail how these other advanced societies have dealt with the aging crisis through a social insurance program and social contract.



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<sup>4</sup>Again, what a contrast. Japan's tax rates are lower than America's, yet they are willing to start a major new social program to help their aging society. The USA, on the other hands, remains mired in a debate on whether to provide \$8 billion a year for a drug benefit in Medicare—a benefit that the Japanese have long had.