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FUTURE OF SOCIETY, THE ECONOMY, AND PENSIONS

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What will be the influence of the following changes on future needs for pension coverage, future amounts of pension benefits, and costs of funding pension plans:

1. Societal changes;
2. Demographic changes;
3. Economic changes.

CHAIRMAN DENNIS M. POLISNER: In some respects this is a most difficult topic to discuss because of the many uncertainties that are involved in the future. But on the other hand, as is the case with many of the actuarial projections which we make, it will be a long time before we find out if what we're saying here today turns out to be right or wrong. It brings to mind a meeting we once had with a client which was a church. The purpose of the meeting was to discuss the actuarial cost method that was being utilized for his pension plan. I made the comment that actuaries are in an enviable position in that, by the time we find out if our cost projections are right or wrong, we will probably all be long retired. The priest smiled and said, "That's pretty good, but in my profession we go you one step farther."

Often we can look to the past for clues to the changes that are likely to occur in the future. The past 20 years have certainly brought about many changes in the pension field, not only in the level of benefits and the cost of funding pension plans, but also in the attitudes of employees, employers, and the government.

We have seen this change in attitude reflected by the use of certain words which are often employed in connection with pension plans. In the past we used such words as: offer, provide, and need. These are now being replaced by such words as: entitlement, requirement, regulations, disclosure, and responsibility.

MR. CHARLES B. H. WATSON: It is an understatement to say that this panel has been handed a challenging assignment this morning.

Although we are actuaries, and thus accustomed to measure out the future every day of our lives, our pension prognostications are usually limited to a consideration of how the uncertainties of the morrow will affect what we know to exist in the present--a particular benefit formula, an existing work force, and so on. Today, however, we have been asked by our moderator to speculate upon what might happen in the years to come to alter, perhaps beyond recognition, the familiar pension structures of the day. He wants us to map out, with all possible precision, a completely unknown landscape. Well, quite frankly, I am not familiar with surveyor's tools that would permit me to measure the effects of incomprehensible future events on unknown benefit programs. A diviner's rod might be the only appropriate yardstick!

I must admit, though, that the moderator has been relatively kind to me. Not only has he asked me to deal with the impact of social and demographic changes on the world of pensions, but he has also allowed me to bring the experiences of other countries to bear on the North American scene. These both are advantages. Unlike economic reversals, social and demographic developments tend to occur gradually, leaving long tracks both before and after--although I must admit that, in social terms, the last decade has been one of almost incredible change. And the introduction of the pension patterns of other countries gives me a greater pool of knowledge to draw on. In effect, it permits the assignment of greater credibility in any experience rating of my remarks.

Any forecast of the future must involve separate, but interrelated, anticipations of three distinct factors--benefits, providers, and finances. What type and level of benefits will be provided under the pension plan of tomorrow? What agencies will provide these benefits, and in what proportions? How much will the benefits cost, and what mechanisms for payment will be used?

The primary question involving the second factor is how the burden will be split between governmental and private sources. This will, of course, be dealt with by Mr. Campbell, but I will take the liberty of adding a few observations based on overseas experience.

Similarly, the projections affecting the third factor are largely the preserve of Mr. Ohman's economics. Demography does, though, also have a significant--one might say vital--role to play, and I shall deal with that.

The first factor--benefit design--will, however, for the most part be the creature of social and demographic forces, albeit influenced by the regulatory and economic environment. Thus it is mine to deal with.

There are obviously a plethora of such forces, of varying intensities and life expectancies, and of equally varying relevancy for our particular concern. Any estimate of these intensities, lifetimes, and relevancies must be a personal one. The following is my prediction as to those which will persist and which will have an impact on pension plan design.

(1) Corporate bigness will continue to spread in the economy. That is, more and more of the nation's business will be carried on by public corporations, as distinguished from partnerships, proprietorships, and private firms, and increasingly these corporations will be parts of larger corporations.

(2) A greater and increasing share of the resources and the work force of this country will be applied to services rather than production. This includes both personal services and social services.

(3) More and more workers will be treated contractually as salaried employees, rather than hourly-paid, and this means both unionized as well as nonunionized.

(4) Perhaps as a corollary to (3), more and more workers will become unionized, including both white-collar and supervisory employees.

(5) Employees, as individuals, will attempt to have more choice and control over their work environment. This includes work conditions, hours of work, fringe benefits and representation on the boards of management of their employers.

(6) Career patterns will change in the direction of greater mobility and variety. Part-time work, sabbaticals, second careers will all become more common, at all levels of the work force. And there will be much greater emphasis on leisure as a fringe benefit.

(7) Individuals will show an increased fondness for risk aversion--avoidance of, and protection against, the hazards of uncertainty.

(8) The trend towards longer years of schooling and training will persist. Now I realize that, at the moment, there is some tendency for the young to denigrate formal schooling. But I do not believe this will continue indefinitely, and I believe that the proliferation of trade and craft training and increased opportunities for "counter-cultural" activities for young people will lead to the same result--the young will enter the real work force at an increasingly advanced age.

(9) Women will become an ever more important part of the work force. This is not to say that they're not already in the work force in great numbers. The recent report of the Advisory Council on Social Security Financing pointed out that over 50% of married women were in the work force at some time during 1973; and even if one looks at the lower percentage participation among the total labor force of women--about 30% as measured by the ILO in 1970--this is much the same as the participation in the more mature industrialized countries where one would expect a higher percentage, such as the United Kingdom or Sweden. So it isn't that women aren't in the work force already, but it is rather that a career commitment to employment, punctuated by periods of family leave, will become much more common, and will include all levels of employment.

(10) There will be increased efforts to eliminate all other aspects of sex discrimination.

(11) There will be marked changes in the patterns of marriage, or absence thereof. The traditional lifetime monogamy will be increasingly replaced by serial monogamy, stable consensual relationships, and even unstable consensual relationships. It should be noted in this regard that the rate of divorce in U.S. marriages, already one in four in 1960, was one in three by 1970.

(12) Mortality rates will continue to decline, even at the higher ages, but there will not be a comparable improvement in the rate of disability. We may be able to keep a disabled man alive longer, and perhaps even rehabilitate him to a greater degree, but we will not be able to prevent the disability.

(13) This is probably one of the most important. Fertility rates will continue at a low level, leading eventually to a stable, and perhaps even decreasing, population size. It should be obvious that I'm talking here about the U.S. and Canada rather than the world as a whole. Population replacement is achieved, after allowing for death and childlessness, by a fertility rate of about 2.11. The actual fertility rate in the U.S., which was 3.7 as recently as 1960, has now dropped to about 1.9, and future experience, as measured by the family expectations of today's wives, is not expected to go above replacement, at least not in the foreseeable future.

(14) The decline in fertility rates, combined with increased longevity and the late entry age into the work force, will mean that the work force will compose a decreasing proportion of the total population, even though there will be some increase in female participation. This, in effect, means that the aged and other retired will make up a larger and larger share of the population; according to one projection, it will go from 10% of the population in 1970 to about 16% in 2050. Or put another way, the number of beneficiaries under U.S. Social Security today is 30 for every 100 workers. It will go up to 45 for every 100 workers in 2030.

(15) Finally, and this is probably a resultant of all of the foregoing, per capita productivity, at least measured in the traditional way, cannot be expected to increase markedly, and certainly not at the historical rates of increase.

Now you will note that my prophecies have not reflected the vision of doom and despair that has been recently vouchsafed to us by the Club of Rome. Partly, this failure arises from despondency. You may recall the old rhyme:

For every evil under the sun,
There is a remedy or there is none.
If there be one, seek till you find it.
If there is none, never mind it.

More positively, though, I believe that our job today is to predict the future of pensions over the short or medium term--in Keynes' phrase, in the long run, we will all be dead, even annuitants--and, over this period, I believe that the truly dreadful long-term implications of scarcity will be muted, offset, or even ignored just sufficiently to allow the scenario I have sketched out to occur.

Now social and demographic tendencies will affect the benefit structures of future pension plans largely through the expectations of the beneficiaries of those plans. It is true that the plan sponsors will initiate pension developments in most instances, and perhaps partly because of what they see as desirable modifications, but on the whole the pressure for change will come from the employee.

Equally obviously, all of the employees' demands will not be granted in whole, perhaps not even in part. The need to maintain employer prerogatives, the constraint of costs, perhaps even public policy considerations, will blunt the social exigencies. Priorities will have to be set, compromises agreed to.

What I am going to give you now, therefore, may be viewed as a "laundry list" of all those modifications in pension plan provisions that are likely to be asked for or considered at one time or another, as a result of the trends I have just discussed. I have also expressed these modifications in their most extreme form--what I see as the outside parameters of desire.

It will be, if you wish, the "impossible dream" of a pension plan--or depending on your outlook, the "intolerable nightmare." The reality will, one prays, be somewhat less grandiose. But in reflecting on them, you should consider that many of the modifications are already operative in the plans of other countries, and so this "dream" or "nightmare" may not be entirely idle.

All right, the ideal pension plan:

(1) With the spread of corporatism in the economy, there will be a concomitant spread of pension plans supplementary to Social Security--provided, of course, that Social Security doesn't take over the whole thing.

(2) Because of the increasing convergence of the contractual employment situation of all workers, there will typically be only one plan covering all categories of workers, or perhaps separate but identical plans covering different classifications. The benefit amounts will reflect differences in compensation levels, but increasingly the difference in the rate of compensation will be the one determinant that will discriminate among benefit amounts.

(3) Benefits will be based on compensation, and as close as possible to final compensation. This is already the case in most European countries. Career-average and flat-rate formulas will be acceptable only if the career average is indexed to allow for change in average earnings or if the flat-rate benefit is altered so as to keep a relatively constant relationship to what amounts to a narrow compensation range.

(4) Retirement pensions for a lifetime employee will be pitched at a much higher level than is common today on this continent. In Europe, 60% to 70% of final compensation is increasingly sought, and granted, with even higher percentages (say 75% to 80%) at the lower pay levels. These benefits, of course, include social security pensions. These will tend to become the norms here as well. What is really aimed at is replacement of close to the person's actual work income, after allowance for some reduction in expense.

(5) Compensation for benefit purposes will tend to include all forms of compensation, including even perquisites if there is a tendency here as elsewhere to substitute perquisites for cash compensation because of tax considerations.

(6) Benefits will be integrated with governmental benefits to the fullest extent possible. Most other countries allow 100% integration; would that we could learn that lesson.

(7) The retirement age will be more flexible, and will reflect the physiological state and psychological needs of the worker. Early retirement on enhanced benefits will be freely available, and postponed retirement will be encouraged by benefit increases. This sort of flexibility will be necessitated by the pressures that will develop on the work force.

(8) Death and disability benefits will be of great importance, and will be provided as part of a unified benefit package, as is now done in most other countries.

(9) The primary death benefit, both before and after retirement, will be in the form of survivor pensions, payable to the spouse and dependent children, as is now the pattern in Europe. These pensions, which will be provided automatically without adjustment to the worker's pension, will be a percentage of the worker's projected or actual pension--say 60% to 70% for the widow and 10% for each dependent child. Lump-sum benefits will be reduced to cover immediate needs only.

(10) Disability benefits will be granted fairly liberally and they will be expressed as a percentage of the worker's compensation at the time of disability, perhaps 60% to 70%.

(11) All pension benefits will, of course, be adjusted to reflect increases in the cost of living and, perhaps, improvements in the standard of living as well. Outside the United States, this has long been the pattern for governmental pensions, but it is increasingly so outside the U.S. for private pensions as well.

(12) Increased mobility, combined with desires for benefit security, will lead to earlier participation in pension plans--perhaps immediate--and improved vesting--perhaps 100% immediate as well. Pensions will be portable. This will be achieved either through a central clearing house for accrued pensions or by a transfer payment provision such as is being worked out in England. Even more strikingly, this portability will tend to carry in its wake demands for the new employer to recognize under his pension plan the prior periods of employment of the worker with other employers with, of course, appropriate offsets if the man has accrued benefits. We now find some prototypes of this expressed in multi-employer plans, and we can see more dramatic prototypes in the economy-wide plans in Finland, Sweden, and other Scandanavian countries.

(13) There will, of course, be no sex discrimination. Pensions will be paid to surviving spouses, and eligibility and all other conditions will be gender-blind. It even appears likely, but regrettable, that mortality tables will be sexless.

(14) There will be no marriage discrimination. Consensual relationships will be recognized on a par with formalized unions, and the position of divorced spouses will be protected, through granting of rights in survivor pensions. In this regard, the example of the Netherlands is of interest; divorced wives in that country have a legal compulsory pro-rata right to survivor pensions, undoubtedly on the basis of service. Also, employees with no legal or consensual partners or dependents will be granted alternative benefits of comparable value, probably to be determined by cafeteria-style choice.

(15) Plan provisions will allow for the new style of work career. Benefits will be preserved during sabbaticals and other interruptions of service, and part-time employees will be covered for benefits.

(16) Free choice in the form of benefits will be available. In particular, lump-sum benefits will be available at retirement and utilized, and this will

partly be because the present discriminatory tax status attached to such benefits will be modified. This has already been done in most other countries.

(17) Employees will have a strong say in the running of the pension plan, through representation on the Board of Trustees charged with its administration.

Well, there you are. The ultimate dream plan of tomorrow. I must reiterate that I neither necessarily favor all these changes nor believe they will all come to pass exactly as described. But, I do believe that the pressures, the social and demographic pressures, are in these directions. They may be prevented and certainly modified by governmental action and the employer's legitimate concern for costs.

I would like to make one comment on the governmental area, although as I said, Don Campbell is going to deal with it. Every country inevitably stages a debate as to what is the proper role of governmental pension benefits --shall they be a floor, a carpet, an air-filled mattress, or even a balloon that expands to fill the entire room? In most countries, the debate is over. In some--Italy, Spain, Portugal, Latin America--government will provide all benefits for nearly everyone. In others--for example, France and the Scandinavian countries--the true social security system provides only modest benefits, but there exist mandatory, regulated, quasi-governmental systems that meet nearly all remaining needs, and private pensions as such play little role. Other countries--Germany, Switzerland, the Netherlands, Belgium--have come to the opposite conclusion, and deliberately limit governmental benefits to a level such that a need for private supplementation still exists. But in a few countries, the debate has not yet been resolved. The proper role of government pensions has not been decided, and the issue could go either way. These countries include Australia, New Zealand, South Africa, the United Kingdom--and Canada and the United States. It will be very interesting to see how the debate ends.

The major limitation on benefit developments, however, is that of costs. Here, totally aside from the economic factors which Mr. Ohman will discuss, demography has an important role to play. I have noted previously that projections of present trends suggest that there will be a substantial reduction in the work force as a proportion of the total population and, what is worse, that there will be a significant increase in the ratio of retired to working members of the population.

The implications are obvious. There will be fewer people to pay for the benefits for more. The recent reports of the Advisory Council on Social Security and the Panel on Social Security Financing appointed by the Senate Committee on Finance have dramatized the impact of this on the U.S. Social Security system--an increase in the cost from the present 10% of covered payroll to between 17% and 24% of covered payroll (depending on the assumptions) by 2050, and, of course, a substantial and growing deficiency in the anticipated financing rates. Part of this is attributable to the redundant indexing for cost-of-living changes that is contained in the present law, but the major share in the deficiency is attributable to the unfavorable turn in demography. Other countries are showing the same trends and experiencing the same problems; for example, it is now clear that the repartition system of which the French have long been so obviously and obnoxiously proud is facing demographic disaster.

Now, at first glance, one might say that this is a problem for the government. But who cares in your private plan, where there is a nice distribution of employees and where the work force is expected to increase. The point, though, is that the social security population is really only the aggregation of all the populations covered under private plans, and that the demographic woes of social security will eventually be visited upon most, if not all, private plans. To the extent that accrued benefits have not been fully funded before a decline in working population occurs, and for fully-indexed benefits it is hard to see how this could happen, benefit costs will inevitably go up as a percentage of payroll. There is inevitably some limit to this process. In Europe today, where pensions are more developed, between 20% and 30% of total payroll goes towards the cost of pensions, and this is widely viewed by most employers and other observers as enough, even before the demography goes bad.

I would, therefore, suggest that the dream plan I have described previously cannot be paid for and that its provisions must be modified in some respects. I would also suggest that these cost problems will force the adoption of two steps that are, to say the least, not popular at present:

(1) Employee contributions will be introduced to meet some of the pension costs, and the introduction of employee contributions will be facilitated through the allowance of tax-deductibility for such contributions.

(2) There will be an increase in the average retirement age, in order to balance off pension costs against available moneys and to achieve an immediate expansion in the work force. It is of interest that the Advisory Council on Social Security concluded that just such an increase in the retirement age might well be needed under the government system by the turn of the century.

Well, it is said that an actuary is a man who knows enough to die on time, and I had hoped at least to finish on time, but I see that the length of my speech has exceeded my "best estimate."

Let me close though with some advice from Lewis Caroll. When Alice asked the Chesire Cat, "Would you tell me, please, which way I ought to go from here?", the cat, smiling, responded, "That depends a great deal on where you want to go." I have spent my time, and yours, describing the place where the winds of social and demographic change would seem to drive us to. I suggest we should spend even more time considering if that really is the place where we want to go and, if not, what can we do to achieve a change in direction.

MR. DONALD F. CAMPBELL*: The future role of the government in the pension area will obviously depend on the wider future roles of government and non-governmental institutions, and the effectiveness with which each serves the interests of its constituents at all levels--world-wide, national, and local.

The subject matter of these comments is presented within the framework of the opinions, recently expressed, of a few recognized representative authorities in their respective fields of competence on the role of government as viewed from their particular interest.

This discussion is presented under three headings:

I. Current Thinking on ERISA.
II. The Revolution of Rising Entitlements.
III. Impact of Global Population Growth and Science-Generated Factors on Governmental Relations.

I. Current thinking on ERISA, mostly critical, was indicated, in the testimony presented at the recently-concluded public oversight hearings on the operations of ERISA held by the Subcommittee on Labor Standards of the House, and the Labor Committee.

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*Mr. Campbell, not a member of the Society, is a member of the Conference of Actuaries in Public Practice, the American Academy of Actuaries, the American Institute of Certified Public Accountants, and the Illinois Bar. He is the head of the consulting firm, Donald F. Campbell and Associates.

This testimony has been reported in the pension and profit-sharing reporting services, so it is not discussed in detail here.

Criticism was centered in four areas:

1. The need for a statutory delineation of sections of the law dealing with prohibited transactions and fiduciary liabilities.
2. Reporting, disclosure, and record-keeping.
3. The employer's 30% of net worth contingency liability, (which is particularly important for multi-employer plans).
4. A re-examination of alternative minimum funding rules.

Representative Dent, Chairman of the Subcommittee, indicated that he would introduce legislation in the near future to meet the criticism of the prohibited transactions section.

Both Assistant Labor Secretary Paul J. Fasser, and I.R.S. Commissioner Donald Alexander, stated that they were not ready to propose changes in the law at this time.

They emphasized that both departments were closely cooperating in all possible areas in their administration of the Act.

Current thinking on ERISA was also indicated at the recent annual conference of the Association of Private Pension and Welfare Plans.

The president of this organization reported on a meeting held on May 1, 1975 at the White House with members of the Association and representatives from Labor, Treasury, and the White House.

He reported a friendly reception and willingness to cooperate on the part of government officials.

The suggestions submitted at this meeting indicated for the most part the concerns called to the attention of the oversight subcommittee.

A most important suggestion at this White House meeting was the proposal made by E. Allen Arnold, F.S.A., to create a national commission on old-age security.

The commission would conduct studies which would identify the complex interrelationships of economic, sociological, and demographic influences on old-age security. It would then propose national goals and a plan for implementing such goals in a practical manner to Congress and the President.

Persons who have read Mr. Arnold's studies along these lines, reported in The Actuary and other publications, will realize the magnitude of the problem.

For example, Mr. Arnold estimates that, based on "reasonably realistic assumptions" --one of which is an assumption of no inflation, an annual pension of $6,000 combining social security and private funds would eventually amount to an annual pension roll of about 41% of earnings of all individuals, aggregating $284 billion annually.

A joint study by economists, sociologists, demographers, and actuaries directed toward the future would be enormously stimulating and profitable in helping to shape the future as it can be realistically desired.

At this same meeting of the Association of Private Pension and Welfare Plans, the Commissioner of Social Security, Bruce Cardwell, reported on Social Security. As this meeting included a special session on Social Security, only the highlights of his comments are given here:

1. The Social Security system cannot exist without the private pension system, and vice versa. (That was his opening statement. It is axiomatic thinking and all the others from the government, and I think everybody, agreed with it.)
2. The respective roles of social security and private pension plans are not clearly understood by the American people.
3. A consensus is developing in Congress, the Administration, Labor, and others to determine what percent of workers' salary should be replaced by social security. Discussions have centered around a replacement

ratio of 65% for low-wage earners, 40% for middle of the range, and 30% for the higher ranges.

4. The difference between the short-term costs and the long-term costs, which are based on 75 years, should be understood. The tremendous uncertainties inherent in the long-term static assumptions used for the long-range cost, based on the uncertainties of peoples' reactions to changing social, political, and economic conditions, should be kept in mind.

Senator Jacob K. Javits, speaking before the American Bar Association Institute on ERISA, suggested four areas for future legislation affecting pension plans, public and private.

1. A reconsideration of the mandatory retirement age of sixty-five, which should be replaced by a flexible retirement age.
2. Concerning integration with social security, a greater effort should be undertaken to determine whether a greater role could be played by private pension plans in meeting our nation's retirement income objectives. He suggests a national policy guaranteeing each American worker 75% of pre-retirement income with appropriate cost-of-living adjustments. Private pension plans would supplement social security benefits to attain this goal.
3. In the Senator's opinion, there has been a failure of the pension reserves--now in excess of $160 billion--to be invested in the most socially effective manner. He, therefore, suggests tax-incentive laws to encourage pension funds to invest at least 10% of their assets in qualified housing investments.
4. He advocates greatly increased corporate ownership among workers "as a means of reducing job dissatisfaction, encouraging quality production, and strengthening our nation's economy."

The Senator concluded his remarks with the statement that, with the implications of the older American population explosion, "Congress may need to find sooner than it thinks more comprehensive and fundamental solutions to the problems of allocating national resources to the retired while pursuing policies geared to restoring full employment, price stability, and adequate economic growth."

Pension systems and insurance companies, many economists agree, are the only great productive savings institutions now available for mobilization of the capital needed for our economy, the achievements of which have been unequalled in world history.

The magnitude of future roles for these insitutions is indicated by a projection to the year 2000 of the total assets of private pension plans and those covering state and local systems, which are expected to reach about four trillion dollars.

II. The wider role of the federal, state, and local governments is suggested by Dr. Daniel Bell, a professor of sociology at Harvard, in an article in the April, 1975 issue of Fortune, titled, "The Revolution of Rising Entitlements." The main points of Professor Bell's thesis can be summarized briefly as follows:

The basic American idea of equality of conditions, the industrial revolution, and the capitalistic order have created a rising standard of living and have held out a tangible promise of plenty for all.

The promise of equality of conditions has been transformed into a revolution of rising "entitlements" with claims on government to implement an array of newly defined and vastly expanded social rights, which claims previously had been worked out by voluntary associations.

The revolution of entitlements has gained more momentum than that of the combined industrial revolution and capitalistic order.

The increasing tendency of Americans to turn to government to solve their problems is indicated by the fact that government's spending at all levels for goods, services, and transfer payments was 18% of the gross national product in 1950 and 32% in 1974.

He states that every indication is for a continued increasing proportion for such governmental payments and that major economic decisions in society will turn necessarily on the decisions of government. These trends indicate that a new kind of political economy is emerging in which major conflicts will be between organized interest groups claiming their share of government largess in government budgets.

In Dr. Bell's opinion, "The direction of the government is clear: The government has made a commitment not only to create a substantial welfare state, but to redress all economic and social inequities as well, and the commitment is largely irreversible." (Emphasis is Dr. Bell's.)

The following facts are given in support of this view:

In 1950, federal spending for social welfare programs was $10.5 billion. That represented 1/4th of the federal budget or 4% of national income. In 1974, the spending was $170 billion, which was 1/2 of the federal budget or 15% of national income.

70% of this spending is accounted for in Social Security payments, Medicaid-Medicare, and welfare payments.

I interpolate here information taken from the Life Insurance Fact Book for 1974.

In 1950, the total benefits paid by life insurance companies in the United States of $3.7 billion, plus the $.3 billion paid by private pension plans (not including government plans), or a total of $4.0 billion, represented about one and one-half percent of national income.

In 1974, the corresponding figures (estimated from the 1973 data shown) are about $22.1 billion for insurance companies, plus about $11.3 billion for private pension plans, for a total of $33.4 billion, or about three percent of national income.

A comparison with the preceding figures for the federal government indicates the increase of the percentage of national income for the federal government payments was 3.8 times, but the increase in percentage of national income provided by private institutions operating in a competitive economy was only 2.0 times.

Dr. Bell cites the fact that the number of social welfare programs has increased from about two hundred in the early years of the Kennedy administration to over eleven hundred at present, and that Congress has voted for the many programs on the assumption that the costs would be financed out of the surplus arising out of the continued growth of the economy, rather than financed out of higher taxes.

These budgetary figures indicate that "Growth has been linked with inflation and it seems unlikely that any democratic society can abolish inflation without disastrous political consequences."

Every poll taken shows that inflation is an object of profound fear ... "yet every imaginable anti-inflationary policy impinges on the welfare of some major interest groups." Modern democratic governments find it politically difficult to make any single group pay the bill.

The cost to attain the nation's human welfare goals that were outlined by President Eisenhower in 1959 was estimated in 1974 by the National Planning Association at $265 billions more in 1980 than in 1969.

Inability to meet these goals may lead to crisis of belief which may weaken political parties. Revolution of rising entitlements threatens to overload the systems with far more grievances than legislators and judges can cope with.

What is needed, in Dr. Bell's view, is agreed-upon rules for settling differences between all contending interest groups in the "battle of the budgets"... and to restore the vitality of state and local institutions of all kinds. He believes that these changes can be worked out within a framework agreed to by most Americans, so that political liberalism with its concern for individual difference and liberty can be retained.

Dr. Bell concludes his article with the reminder of the limits of human power--both individually and socially--which history has shown to be the most enduring truth about the human condition.

III. Recent reports remind us once again of the changing world environmental systems.

A report by the executive director of the United Nation's Environment Program, issued in April, 1975, concluded that there is increasing evidence that human beings using "the massive leverage which science and technology have made available" are creating serious risks to their own health and well-being. As the size of the human populations and economic systems increase, so does man's potential for disrupting national environmental systems upon which life depends."

While the potential for serious disruption is real, many scientists and others believe that science and technology can, and is, enabling man to shape an evolutionary history of his own which can be successfully coordinated with Darwinian evolutionary biological history.

One such model for a future human evolutionary pattern is suggested by Dr. Jonas Salk in his recent book titled "The Survival of the Wisest."

He suggests that the self-correcting genetically coded patterns of growth for other living systems resulting from long evolutionary histories be studied for understanding of possible consequences on the growth of human populations.

He suggests that the S-shaped, or sigmoid, curve may be applicable to the growth of the world human population which also exists in a like closed system.

Since these S-shaped growth curves for the living systems indicate, up to the point of inflection, a progressive acceleration which changes at that point to a progressive deceleration and subsequent stabilization at an optimum survival level, the same pattern for stabilization may apply for human populations.

This stabilization can result for the human population by a combination of conscious human will and unconscious hereditary forces.

He suggests that, at the different time stages along the curve, different life styles and human values are necessary in order to adapt for survival.

He suggests that the new trend in human values appears to be developing on a world-wide basis--is based on cooperation, with greater emphasis on serving the whole rather than the individual.

Such a trend would indicate that a growth curve of world-wide human population may be nearing the point of inflection which will necessitate a world-wide concerted effort to bring about the decelaration of world population, now at 4 billion people and increasing at 2% a year or 80,000,000 persons a year.

Another factor of great importance which will affect future life styles was indicated in a report issued in February, 1975 by the National Academy of Science, titled "Mineral Resources and the Environment" which stated that the world faces a series of shortages in those resources vital to modern industrial civilization. Shortages will occur in one material after the other--

with the first real shortage perhaps only a few years away.

The report concluded with the statement that it was "essentially impossible for the United States' oil production to rise enough in the next decade to make the nation independent of foreign supplies."

The factors of (1) rapidly increasing world population, (2) decreasing world vital resources, and (3) revolution of rising entitlements among the people of the world who are following the example of the United States must be given a present value in formulating solutions to common problems.

The importance of the timing of the capabilities of science and technology for the use of society with realistic expectations was emphasized by Robert V. Roosa, partner in Brown Brothers, Harriman & Co., in a paper on "Controlling Inflation during Recession" at a meeting of the Atlantic Institute for International Affairs in Munich, last month, as noted in the Wall Street Journal, who said:

"What has happened, let me repeat, is that the insistence on growth, and rapid growth, has become so widespread as completely to outrun the supply capabilities of the world economy. This is not to accept the "Club of Rome's" discouraged view that the world is nearing the asymptotic limits for growth, but it is to recognize, as the grain of truth in their impressive analysis, that there is a problem of pace.

"Supply may not have absolute limits, but there does have to be an effective mobilization of capital, labor, and technology--within the constraints of social and environmental requirements--in order to expand the supply of the world's goods and services...and that mobilization has just not been able to keep up with the accelerating pace of world-wide demand."

Continuous refinement of actuarial models to meet changing future conditions by means of correcting feedback procedures based on the latest available information is in keeping with the human and biological evolutionary thesis for adaptation and survival.

Actuarial science can contribute to an understanding of the value of cooperative relationships within or between political, social, and economic institutions.

Actuarial models themselves are examples of the value of harmonious relationships among the different factors in the solution of a problem.

MR. CARL R. OHMAN: I recently read an article on the subject of glaciers. The article went through an interesting and rather lengthy review of climatic trends over the 7,000 years since the last glacier. It reviewed various heating periods and cooling periods, and the various theories predicting when the next glacier might occur. It reviewed the various theories about whether we are now in a cooling trend or whether we are now in a warming trend, citing such data as the fact that the growing season in Britian now appears to be two weeks shorter than it was some years ago. After reviewing the various theories that were put forward, one could conclude that we are perhaps in a warming trend, or on the other hand we are perhaps in a cooling trend, and in particular that our own contribution to the climatic changes, the pollution of the atmosphere and the seas, may be hastening the next glacier or may be slowing it down.

In reviewing all this I couldn't help but draw the parallel to my assignment here today, which is to look into the future of the economy and to note its relationship to the growth of pension plans.

Now this is certainly a timely topic, particularly in view of the staggering economic happenings of the recent past. It is now generally agreed that the U.S. economy has been experiencing the deepest recession since the 30's. Unemployment has risen to more than 8% of the civilian labor force. Industrial production has dropped, and it seems clear that 1974 and 1975 will be the first two consecutive years of decline in the total output of goods and services (real gross national product) since before World War II. The great bull market of the sixties ended somewhere around 1973, with the Dow Jones index plummeting from its all-time high by more than 400 points by the end of 1974. Interest rates have soared, both short-term and long-term rates--short-term rates moving as high as 12% last year. The oil embargo at the end of 1973 and early 1974 shocked us into the realization that our energy resources are finite. The annual rate of inflation moved to record highs, reaching a peak of 13% last summer measured by the Consumer Price Index.

There are hopeful signs now that the recession may be bottoming out and that some improvement in the economy may be expected later this year or at least next year. The stock market already has risen dramatically from last year's lows, and it is easy to believe that we have entered another bull market--though there are some willing to predict that the Dow Jones will see 500 before the end of 1975. Short-term interest rates have dropped from the highs of last year, though long-term rates remain high and seem to be holding at previous levels. The future direction of interest rates is at best uncertain. The oil embargo was lifted and the energy crisis, or at least the immediacy of the energy crisis, has eased temporarily, but the threat of embargo is still there and we have certainly not solved our energy problems. The rate of inflation now appears to be easing and the annual rate of increase in the Consumer Price Index in 1975 should be considerably below last year's rates, though still considerably above the levels experienced in the pre-Vietnam period.

The long-range future with regard to inflation, just to take one measure of our economic health, is very uncertain. One scenario considered a likely possibility by many is that the rate of inflation will continue to decline through 1976 and perhaps 1977, but to a level still above the pre-Vietnam levels, then rise through the remainder of the decade to levels even above the 1974 highs, followed by successive periods of decelerating and accelerating rates of inflation but with an underlying increasing trend. The main problem with this scenario with regard to pension plans is that it produces wild fluctuations in projections of benefits and costs under pension plans, and, therefore, it is almost chaotic to try to plan for the future of pension plans on such a scenario. A scenario which assumes that the current inflation will burn itself out and that rates of inflation will eventually return to pre-Vietnam levels is certainly far easier to work with and more comfortable to contemplate, but some would regard it as somewhat less than realistic.

But what about the effects of the economy on pension plans? Before discussing the question, let us consider for a moment the other side of the coin--the effect of pension plans themselves, and of the growth of pension plans, on the economy. In 1972, contributions to private pension plans amounted to \$19.4 billion, while benefit payments amounted to \$10.0 billion. Adding government-administered retirement systems for civilian employees (plans for federal civilian employees, plans for state and municipal government employees, and the railroad retirement system) brings these amounts to \$35.3 billion in contributions, \$20.2 billion in benefit payments. Adding OASDI brings the total of 1972 contributions to \$78.2 billion and total 1972 benefit payments to \$58.5 billion. The corresponding figures for 1973, 1974, and 1975 are substantially higher. Also, these benefit payment amounts do not include payments under federal military pensions and certain other unfunded retirement systems. They also don't include other types of welfare systems.

From these figures, it is clear that pension plans in this country, both private and public plans, produce a major redistribution of the gross national income--of the nation's spending power--from the producing segment of the population to the nonproducing segment, from the younger and middle-aged members of the population to older members, and, to some extent, a redistribution from higher income to lower income members of the population. To the extent that spending patterns differ for different segments of the population, this redistribution can have a profound effect on the economy.

Also, the substantial excess, currently, of pension plan contributions over benefit payments (the figures that I quoted would mean that there was an excess of $20 billion in 1972), if not offset by reductions in personal savings, produces a redistribution of the gross national income between current spending and deferred spending (i.e. savings). That too can have a profound effect on the economy. Pension plans also produce an increase in institutional investing at the expense of individual investing, and, to the extent that institutional investors behave differently as a group from individual investors (such as a possible tendency suggested by some that institutional investors are more inclined to "follow the leader"), this could have important effects on the economy. Certainly, the vast accumulation of assets in pension funds, which provides an important source of capital for investment in this country, can also significantly affect the economy.

With these possible effects of pension plans on the economy, how has the growth of pension plans contributed to the economic realities of recent years and what can we expect in the future? To what extent has the growth of pension plans produced or contributed to the current inflation by stimulating spending, by increasing the cost of labor, or by increasing the supply of capital for investment? To what extent have pension plans dampened the impact of the current recession, by stimulating spending or by continuing to supply capital when other sources were no longer available? To what extent have pensions eased the pain of unemployment during this recession, through the availability of early retirement and other termination benefits? In any evaluation of the economy and its effect on pensions, it is necessary first to consider these questions about the impact of the growth of pensions on the economy.

Now, what of the effect of the economy on pension plans? In what ways have the economic crises of the recent past and the economic uncertainties of the present and the economic uncertainties that may be in the future affected the growth of pension plans in this country? Have economic conditions produced any change in the ability and willingness of employers to introduce new pension plans, to improve existing plans, or to fund existing benefits? Have economic conditions produced any change in the needs of, or demands by, employees for improved benefits--any shift in demand from deferred compensation (pensions) to immediate cash compensation? Will economic conditions, together with the implementation of plan termination insurance under ERISA, result in significant numbers of plan terminations? I have asked many questions here, but I have very few answers.

I would like to discuss three specific areas in which the economy may be expected to influence the future of pension plans. These are: (1) plan design, (2) investment policy, and (3) the actuarial assumptions and methods affecting funding decisions for pension plans.

There are several ways in which the economy may influence the design of pension plans. First, the recent experience with inflation may encourage employers to reconsider the appropriateness of present cost-of-living features in their plans, including such features as final-pay benefit formulas, indexed benefits, and variable annuities. The employer may want to reconsider whether he really can afford final-pay benefits or indexed benefits under extreme conditions of inflation, particularly in view of ERISA's requirement that such features be funded for. The employer should also reconsider whether his present cost-of-living features produce the right result for the employees.

Thus, for example, unlimited post-retirement cost-of-living increases tied to the Consumer Price Index may well be beyond the ability of the employer to fund on a realistic basis. Limiting post-retirement cost-of-living increases to some specified maximum annual percentage (such as 3%) may well solve his funding requirements, but it produces results in a time of very high inflation such as the present which may have little appeal for employees. Cost-of-living adjustments tied to performance of the stock market have been very popular in times of a bull market, but it's likely that they have currently lost some of their former appeal, particularly for those who are already retired and have received the first annual adjustment resulting from the change in the annuity unit values under some variable annuity types of plans.

A second effect that economic uncertainties, particularly with respect to inflation, may have on pension plan design is that some employers may decide to replace existing defined benefit plans by defined contribution plans. A defined contribution plan may fail to provide an adequate retirement income in the face of continued inflation, but it is easier for the employer to control his pension costs under such a plan in an inflationary period. A defined contribution plan may also be more easily understood by employees and thus, possibly, more popular with employees than a defined benefit type plan. Also, using a target benefit concept, the employer can incorporate some of the more flexible design aspects which characterize defined benefit plans into the defined contribution plan framework, and this may encourage people towards the defined contribution plan. It should be noted though, that while economic factors may contribute to an employer's decision to change to a defined contribution plan, the funding and plan termination insurance provisions of ERISA are likely to play a greater role in any such decision.

Another area in which economic conditions might influence plan design, probably to a lesser extent than the others, is the early retirement provision, and retirement provisions in general. If recessionary conditions force an employer to cut back on his work force, he may consider introduction of a special liberal early retirement benefit to be applied on a temporary basis to encourage older employees to retire rather than lay off younger employees. (This is, of course, a short-term question; probably more important in the long term, as Barry Watson pointed out, is that demographic and economic conditions --including the economic problems of funding pension plans under the influence of inflation--may prompt pension plans to increase their retirement age.)

In what ways can we expect recent economic trends to influence investment policies of pension plans? Investment policy may be affected indirectly by inflation, but it is likely to be more directly affected by the way in which the capital markets respond to inflation. During the past year, stock prices declined, at least partly in response to inflation, and the asset values of many pension plans were seriously eroded by the declining stock values. Similarly, interest rates have risen, largely in response to inflation, and the asset values of many pension plans were also eroded by declines in the market value of bonds due to the rising interest rates. These effects may well be short term in nature and, since most pension plans don't have to sell securities and so can take essentially a long-range outlook, these temporary asset losses may well have little or no impact on investment policy. However, when the current economic situation and future uncertainties are considered, together with the new funding requirements of ERISA which require an explicit recognition of market values of assets for certain purposes, and also in recognition of the fiduciary requirements of ERISA, pension managers may be less willing than before to accept the risk of asset losses (however temporary) either on common stocks or on long-term bonds. It is possible that, in setting future investment policy, pension managers may place less emphasis than before on maximizing yields on investments, and greater emphasis on liquidity and cash flow needs.

The recent economic trends have certainly affected current experience under pension plans with regard to investment earnings, asset values, incidence of early retirement, incidence and duration of disability, nonvested terminations, administrative expenses, and salary scales--and the trends of current experience will no doubt influence the actuary in developing his "best estimate" of future experience--the "best estimate" that is referred to in the ERISA requirements. How will these trends, together with ERISA's requirements, affect the choice of actuarial assumptions and methods used in pension plan valuations?

One effect may be the increased use by actuaries of actuarial assumptions which give explicit recognition to the anticipated effects of inflation. This point has been admirably covered in the recent Exposure Draft Recommendation of the Academy's Committee on Actuarial Principles and Practices in Connection with Pension Plans.

Another effect of the current economic uncertainties may be a greater realization by actuaries of the value of multiple valuations. A single valuation based on a single set of assumptions, however well they were selected, produces only an expected value of a distribution of possible outcomes, with no indication of the variance or other characteristics of the distribution.

A series of calculations (multiple valuations) using different scenarios for future interest rates and other factors (including at least one scenario that recognizes that in real life interest rates do not remain constant for all time) can give an indication of the underlying variance and risk characteristics involved in the calculations. This could provide the actuary with a statistical basis to support his "best estimates," thus enabling him at least to have a more rational basis for his recommendations. This use of multiple calculations would, of course, be more expensive, and the results probably would not be really appreciated by the employer or plan administrator who is paying the bill. Also, ERISA requires a single actuarial basis for most calculations required of the actuary on behalf of plan participants. Hence, however desirable multiple calculations may be, in view of the economic uncertainties of the present and future, it is not likely that there will be a major trend in this direction in the immediate future.

In conclusion, there are several significant ways in which the economy may affect the future of pension plans, just as the growth of pension plans themselves may significantly affect the economy. As important as this interrelationship between the economy and pensions may be, however, it is likely that the future of pension plans will depend to a much greater extent on future legislative developments toward greater federal regulation of pension plans and further expansion of Social Security and other government programs, and to a greater extent on future demographic trends, than it will on the economy.

MR. GEORGE W. POZNANSKI: Mr. Watson indicated that in certain European countries the debate concerning the relative importance of Social Security versus private pensions has been resolved, at least temporarily, in favor of private pensions and, consequently, that a relatively modest benefit is provided under Social Security. How is the maintenance of purchasing power under private pensions handled in these countries?

MR. WATSON: First of all, it's not necessarily true that in all these countries the government pension is completely inadequate. For example, in a constitutional referendum the people of Switzerland said, "We believe in a three-pronged system which includes government pensions, private pension plans, and individual savings, and we believe that the over-all payment should be 60%." Now, at the low pay ranges, the social security benefits cover nearly all of this. The point is that, while there is no intention of expanding the social security system to go beyond that point, the governmental benefits are not completely trivial. A deliberate statement was made that the private system will continue to be necessary. In most of these countries, for example the Netherlands, most private plans are also indexed to take into account changes in the cost of living. In some plans this is written into the plan; in other cases it is done regularly on an ad hoc basis by the employer.

Another illustration is the recently-passed German version of ERISA. The Act says that private pension plans must take into account changes in the cost of living and must also have some arrangement for meeting these costs. The Act does not seem to define clearly what the plans have to do. On the other hand, there are labor boards in Germany which have the power to investigate what the plans are actually doing and to make their own adjustments. So, in effect, the trend is definitely that, either by specific plan provisions or by the force of circumstances, private plans are being expected to index benefits, just the same as nearly every governmental system in Europe.

MR. POZNANSKI: Can private employers finance the additional cost of inflation? Do they have, for instance, investment bonds or other instruments issued by governments which are themselves indexed?

MR. WATSON: Very rarely. I might add that one way in which the employers in most countries find it possible to pay for these benefits is the fact that, in countries such as the Netherlands or Germany, they very rarely take into account any projected increases in future compensation.

MR. E. ALLEN ARNOLD: We have a lot to worry about regarding our own future ability to finance pensions. But I think in respect to purely demographic factors, such as lower fertility rates leading to a stabilized population, there are a couple of offsets which may help with the increased burden of pensioners versus the working population. The first offset is that with smaller families and fewer children to support, a worker will be better able either to pay higher taxes or to have his employer put more into pension plan contributions.

The second offset is that, as we stabilize population growth, resources that have been used for schools, highways, factories, and housing, those investments which are made in response to demographic factors, now can be applied to economic investments or to maintenance of a better standard of living for the larger retired population.

MRS. ANNA M. RAPPAPORT: I would like to raise a question with respect to some of the demographic changes that have taken place: Should pensions be based on a unit consisting of the family, or a unit consisting of the individual?

I am concerned that the present system of providing benefits based on the family unit with survivor benefits paid to dependent spouses may not work in the future. I point to the following:

1. There is an increase in divorce rates, with a trend to serial family formation. One adult may have several marriage partners during adult lifetime.

2. If a man dies before retirement, the present system usually does not provide adequately for family members.

3. It may be increasingly difficult in the future to define which relationship(s) are families for pension purposes.

4. Women's participation in the labor force has increased markedly while men's participation has decreased.

5. The Social Security system provides vastly different benefits for workers who pay taxes at the same rates if these are their circumstances:
   a. a single man
   b. a married man with a dependent wife plus 3 children
   c. a working wife
   d. a single parent supporting a household

   This situation is further complicated as people move in and out of the labor force.

6. The services of a wife as mother and housekeeper have traditionally been given a zero economic value. A retirement system based on treating each person as an individual would have to include a method of attaching economic value to these services.

   In our society, the individual who contributes as a wage earner has great advantages over the individual who functions full time as a wife and mother.

I have no solution to propose to my question, but feel that it is vitally important that this issue be studied. It should be studied from the viewpoint that all individuals have retirement needs, and that the pension systems operating in our society should meet those needs.

MR. WATSON: As I see it, this is why there will continue to be an emphasis on family benefits instead of individual benefits. From the philosophic viewpoint, the provision of individual benefits only would mean a de-emphasis by society of family interests. This is a much more dramatic change for our society than changes in benefits.

Under some European social security systems, consideration is being given to providing benefits for homemakers as a matter of right, based on some economic evaluation of their contribution to society. No system has done anything about it, but it is being talked about.

Probably, the employee without a family is going to be asking for benefit levels comparable to family benefits.

QUESTION: Is the expected general future increase in pension benefits to be funded privately or by Social Security?

MR. CAMPBELL: The question is, what is the proper balance between the government role and the private role. The Commissioner of Social Security has indicated that Americans have to decide what objectives along these lines to work for. As he has indicated, the consensus now is that the objective is 60% - 40% - 30% for social security for the lower income, intermediate, and higher income groups, respectively, with the rest up to the private sector. And that should be the objective. I think that's in keeping with the American tradition of maximum amount of liberty and freedom on the part of all and the way to give the greatest incentive to the private sector.

QUESTION: Will there be a large number of plan terminations as a result of ERISA?

MR. OHMAN: First of all, it does appear that ERISA requires that cost-of-living benefits be funded for. It does appear that the actuary will be expected to take into account all factors that would affect the future projected benefits, which would certainly include any update on account of inflation. Also, I believe it is required that any cost-of-living post-retirement benefit adjustment, such as indexed benefits, would be funded. So that, whereas in many cases employers with final pay plans and cost-of-living benefits may not have been currently recognizing these benefits or worrying about their impact, they're certainly going to have to now. Whether this will contribute to a large number of plan terminations can only be guessed at right now. A large number of terminations have already been reported, but I don't know whether this represents an unusually large number or what would normally be expected during the year. There is one other aspect, though. The employer who decides currently to adopt a pension plan or who decides to cancel a defined benefit plan and replace it by a defined contribution plan has to face the consequences of the employer liability, to whatever extent that applies to him.

MR. WATSON: I understand that the number of terminations since the adoption of ERISA has been larger than expected, particularly for small plans. But it is still debatable whether this is due to economic conditions or to the sheer enormity of having to comply with all the provisions of ERISA.

MR. JAMES F. BIGGS: One problem that we as a nation face is the price competitiveness of our goods in international markets. If American business is going to establish private pension plans to take care of a large portion of the retirement problems in this country, and if those retirement plans are going to be advance-funded retirement plans, and if as part of the required advance funding process we are going to have to contemplate future inflation, future cost-of-living increases, and so on, and therefore in effect build into the cost of goods and services today very substantial future retirement costs, does this automatically put us at a competitive disadvantage with respect to countries which are operating almost totally socially funded retirement programs on a pay-as-you-go basis?

MR. WATSON: That's an extremely good point. For example, we have one client who has a subsidiary in Brazil. In that country, there is already a very substantial social security system, which of course, like most social security systems, is on what amounts to pay-as-you-go funding. There are apparently a number of companies that are putting pension plans into existence - supplementary plans - that are, in effect, providing 100% of final year's pay as pension, with a survivor benefit to widow and children after death; and there are calculations being made by local actuaries on effectively a pay-as-you-go basis, or at most on a sort of modified terminal funding basis, which, if you consider the fact that the average age of the work force is extremely young in Brazil practically amounts to pay as you go. And they plan to make perhaps 50% pay increases. So our client, a U.S. based corporation which uses advance funding along the more traditional line around the world, in the U.S. and elsewhere, is now faced with a pension plan down there which, by traditional methods, is probably costing them more than they really can afford but is probably inadequate by local standards. So they are taking a terrible whipsaw effect. Even in the absence of the internal effect within the same multi-national corporate situation, I think that competition between the U.S. and foreign countries is exactly the same problem. Probably the question is, shall we do nothing to become competitive, or shall we all go to hell in the same handbasket?

QUESTION: I would like to ask Mr. Campbell if he thinks there will be an infusion of general revenues to help finance the U.S. Social Security system, and, if the answer is yes, what will be the implications of that infusion, both with regard to inflation and with regard to private pensions?

MR. CAMPBELL: I don't think anyone in government is in favor of that approach at the present time. The Commissioner of Social Security indicated that the present method of financing is the one to be followed, as the only method of keeping control of the costs.

MR. WATSON: I think that general revenue financing for the retirement pensions per se is relatively unlikely. It's rather uncommon anywhere in the world to have much in the way of general revenue financing for the retirement pensions. What you may find is general revenue financing sneaking in to take care of some of the supplemental type benefits. For example, the Advisory Council was, in effect, suggesting that supplementary financing take over Medicare. I think it's in this area, and some of the survivor pensions, etc., where you can perhaps agree that there isn't quite so much of a build-up of equities for the workers.

MR. OHMAN: I would like to go back just for a moment to the previous question that was raised about competitive pricing of products. Obviously, the person who does not realistically reflect the costs of his products in order to charge a price that is lower than someone else's is going out and buying his business. Anyone who prices a pension benefit, with respect to pricing policy for his goods or services, on the basis of current outlay is just kidding himself about underlying costs. Therefore, I question whether the ERISA requirements for funding pensions would by themselves have an impact on what price the employer should charge for his product. Unrealistic financing of true long-term cost of pensions is the same as ignoring other costs.

MR. JUAN N. KELLY: If matching Social Security contribution rates (by employer and employee) reach 25% of FICA wages as predicted by Geoffrey Calvert in his paper delivered to the American Pension Conference in December, 1973, using very liberal assumptions,

a) Is there a possibility of the U.S. private pension industry surviving?
b) If the answer to a) is "Yes", what can we do as professionals to enhance this possibility and at the same time enhance our own career security?

MR. POLISNER: In Mr. Calvert's 1973 paper, I believe he altered only slightly the assumptions which went into the Social Security cost estimates. He focused on the difference between the wage base assumption (5%) and the cost-of-living index (2 3/4%) which was used by the Social Security Administration. By reducing this $2\frac{1}{4}\%$ differential to small ranges such as $1\frac{1}{2}\%$ or 1%, the future benefit and contribution levels escalated severely. Combined employee and employer contribution rates reached levels in excess of 25%. I do not believe that the American people will tolerate Social Security costs at this level. Assuming that to be the case, there will not be a threat to the private pension system. The indexing of Social Security benefits should be studied and changes should be made which will preclude the occurrence of the events which Mr. Calvert has predicted.