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CURRENT DEVELOPMENTS IN PENSIONS

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This session will address both gradual and sudden developments within government and industry circles that could have a marked effect on pension planning in the future. Our discussion will cover:

1. The Future of Plan Termination Insurance

2. Government Policy: Implications for Pension Plan Development

3. Recent Trends in Social Investing

Mr. Robert B. Aglira: Welcome to Panel Discussion #4 entitled Current Developments In Pensions. I think we have been able to put together some stimulating topics that we'd like to present to you this morning. I am hoping we can stimulate some discussion on your part as well as ours.

Let me introduce you to the panelists as well as their topics. Clyde Beers is a Vice President and Consulting Actuary at TPF&C in the Philadelphia Office where he has spent his entire career. He joined in 1965, became a principal 7 years later and was made a Vice President in 1981. He will be speaking on the current status of the defined benefit plan and the defined contribution plan and devote particular attention to the legislative support that has been given over the past few years for defined contribution vehicles in particular.

Paul Lew is a pension consultant for the Wyatt Company in Washington, D.C. He has been with them for the past three years and gets involved in virtually all aspects of pension planning, design, administration and funding. Prior to joining Wyatt's Washington office, he was a tax specialist with the National office of the IRS and what he will be talking about this morning is a brief historical overview and a current status report on the PBGC and what has been happening in the PBGC; what legislation is pending, has been introduced and generally where he and Wyatt as a firm see the PBGC going in the future.

Larry Kramer is a Partner with the Philadelphia law firm of Ballard, Spahr, Andrews & Ingersoll. He is, I believe, the only one in the firm who dedicates 100% of his time to pension planning and has been doing so for approximately 10 years. He is a graduate of Columbia Law School. For the past 2 or 3 years, Larry has become very much interested in pension investing. He will be addressing what he sees as a linkage between participant demographics and capital markets in terms of pension fund investing. He will make some very interesting forecasts and if there is a controversial topic here this morning, I think we will agree that it is this one.

Paul Lew will be our first speaker and will be speaking about current developments in the PBGC.

Mr. Paul D. Lew: When the "Retirement Income Incentives and Administrative Simplification Act" H.R. 4330/S.1541 was introduced in July of 1981, it was felt by many that the introduction of additional major pension legislation so soon after the enactment of the Multiemployer Pension Plan Amendments Act was premature. The "informed" view was that Congress did not want to deal with any new changes in the pension area, with the possible exception of single employer plan termination. This was the "hot" portion of the bill, as it went so would go the rest of the Titles of the Bill.

Now, little more than a year later, we are once again preparing to deal with significant and far reaching changes in the pension law. The prospective comparability of corporate and non-corporate plans and the enactment of comprehensive "top-heavy" plan rules constitute major breaks from the past history of regulation. It is a matter of some interest to note that with all the changes brought about by the Tax Equity and Fiscal Responsibility Tax Act of 1982, virtually the only area of pension law affecting single employer plans that is unaltered is that relating to single employer terminations. So much for the "informed" or "insiders" view of Congress.

I have come here neither to praise H.R. 4330 nor to bury it. Praise somehow seems inappropriate for a bill that has been described to me as having collapsed under the weight of its own complexities. Burial is also inappropriate since there are significant, agreed upon, problem areas in the single employer termination rules which may require Congressional action in the years ahead. H.R. 4330 has certainly resulted in a thorough review of the single employer termination area and clarified the principal areas of contention. It is the resolution of the issues in these areas which will determine the future path of legislation, if any, as it relates to the Pension Benefit Guaranty Corporation's regulation of single employer terminations.

1. <u>The Pension Benefit Guaranty Corporation's Single Employer Premium.</u>

In computing their premium, the PBGC makes certain assumptions regarding the type of benefits they wil have to guarantee and the actuarial value of these liabilities. In addition, when the PBGC determines that there is a shortfall in their revenue, the shortfall or loss is amortized over a period of years and factored into their request for a premium increase. All three of these areas are in controversy.

a. Benefit Guarantees

- excessive as they include early retirement, disability, and other subsidies. Should be cut to simply a normal retirement benefit payable at 65.

- not enough and should be expanded to cover special plant shut-down benefits and codified rather than being determined by regulation.

b. Interest Rate for Valuing Liabilities

- belief that interest rate is understated as a result of comparing PBGC rates to insurance company bid rates.

c. Amortization Period for Shortfall

- amortization over 5 years creates an excessively high premium.

Additionally, the actual process for obtaining a premium increase has been called into question. While currently it requires Congressional approval before becoming effective, some groups wish to eliminate this requirement entirely. Alternatively, different groups wish to retain the current rules with the additional proviso that if Congress fails to act guaranteed levels will be decreased.

2. The Insurable Event

Currently an employer may terminate a plan and pay the PBGC the lesser of the unfunded guaranteed benefits under the plan or 30% of net worth in satisfaction of all statutory obligations. As an option, an employer may freeze future accruals of benefits and continue to fund a plan until sufficient funds exist to cover all guaranteed benefits. At such time the plan may be terminated and all statutory obligations satisfied. Because of Facet, Wisconsin Steel, Alloy-Tek, and more recently Rath, it is strongly felt that the insurable event should be changed from plan termination to employer insolvency to prevent employer "dumping." The definition of insolvency, however, is somewhat controversial.

a. Insolvency

- liquidation, Chapter 11 bankruptcy (reorganization), assignment for benefit of creditors, appointment of a receiver, or commencement of process of concluding its business are generally accepted terms.

- liquidation is strongly preferred by some groups because guarantee levels are frozen at insurable event and they would prefer guaranteed levels to be as high as possible.

Similarly, the PBGC's right to involuntarily terminate a plan has been challenged because of the loss of guarantee phase-ins.

b. Termination

A frozen plan or plan termination under virtually all proposals would be required to be funded at a higher level than is presently necessary. Proposals generally have focused on requiring funding of all vested benefits rather than guaranteed benefits, although several proposals have focused on unfunded accrued benefits. By amendment of section 412 of the Code, a new funding standard would be applied requiring amortization of the unfunded vested or unfunded accrued liability over 15 years. Experience gains and losses, gains or losses from changes in actuarial assumptions, and waived funding deficiencies would be amortized over 5 years. The initial unfunded liability to be amortized is based on the unfunded liability as of the last day of the plan year preceding the year of termination.

An insolvency contribution requiring an employer to pay an amount equal to a year's benefit payments may also be required where assets are, for example, less than 3 times benefit payments.

3. Status of the PBGC Claim

Currently the PBGC has a "tax" lien against the employer for 30% of his net worth. For example, an employer has assets of $500,000, non-pension unsecured liabilities of $400,000, and a net worth of $100,000. If the PBGC claim is for $200,000, they are still limited to receiving $30,000 before other creditors. PBGC wants to be a general creditor. If this change is made, all creditors in the example would receive 83¢ on the dollar but the PBGC would happily get $166,667 rather than $30,000. The business community is very unhappy about the effects on credit of such a change. Options include:

a. Increasing Net Worth Limit to 50%, 75%, or 100%

b. Subordinating PBGC to all other Creditors

c. Subordinated Creditor where Certain Funding Requirements are Met; General Creditor Otherwise

d. Increase Net Worth and Deny Deductions for New Plan if Liability to PBGC Not Paid in Full

4. <u>Contingent Employer Liability in Case of Sale or Change in Contributing Sponsor</u>

   a. Period of 5 to 15 years after either sale or change in membership in controlled group. If two combined could be 30 years. Reduced to 15 years maximum.

   b. Liability is generally lesser of unfunded guaranteed benefits at insolvency or (1) unfunded guaranteed, (2) unfunded vested, or (3) unfunded accrued on date of sale or change in sponsor.

   c. <u>Exceptions or Safe Harbors</u>

5. <u>Personal Liability</u>

Failure to notify the PBGC of an insurable event or the sale of 10% of a contributing sponsor or member of controlled group when proceeds used to satisfy past due creditors obligations or paid to persons outside the control group, or default on a debt instrument, or the closing of a facility if a 20% reduction in the coverage of a plan of the employer control group results triggers personal liability. The liability is for any losses to the PBGC and the parties covered are each sponsor, member of control group, plan administrator, trustee or anyone else specified by the PBGC. If the administrator is an individual or the business is incorporated, the liability is limited to $100 per day.

It is impossible to predict how any of these issues I have discussed can be resolved. Opening up the area of single employer termination has proved to be a Pandora's box for all concerned. The PBGC by supporting changes in the insurance system has found its entire premium procedure under attack from the business community. The large business community, whose primary interest is a reduction in the PBGC premium, has somewhat belatedly discovered that general creditor status with the PBGC poses a significant threat to their ability to borrow funds. Labor which should be enjoying the spectacle of a divided business community's interesting squabbles has found that the proposals can adversely affect the benefit guarantees of union employees in several ways. Small business given the option would prefer no bill at all. What I strongly suggest is that you keep a close watch on any single employer legislation and proposals and read the fine print. With so many competing and conflicting interests the only certain statement is that no one's life, liberty or property are safe during the legislative process.

Mr. Aglira: In dealing with my clients, I'm getting a sense that the public out there is losing confidence in the PBGC's ability to sustain itself. Adverse publicity is starting to work itself into the press. Corporate financial officers are aware that the PBGC has requested a substantial rate increase and is having a great deal of difficulty getting it approved. They also know about Braniff, International Harvester and other publicized cases that are pending. I have a feeling that this is the year something must be resolved from the PBGC's perspective.

Let's turn our attention now to Clyde Beers.

Mr. Clyde D. Beers: The vast majority of existing retirement plans in the United States are defined benefit in nature. There are, of course, some notable exceptions. Educational and other nonprofit institutions,for example, have favored defined contribution pension arrangements because of the unique tax sanctions granted them under Section 403(b) of the Internal Revenue Code. And a number of profit making organizations have opted for deferred profit sharing arrangements to serve as retirement plans. Nevertheless, the defined benefit approach was favored by most employers -- at least until the passage of ERISA.

This preference for defined benefit over defined contribution plans has been due to many factors:

- Most employers have specific income-replacement objectives in mind when establishing a retirement plan. A defined benefit plan can be structured to achieve these objectives; the defined contribution approach, on the other hand, will produce plan benefits that either fail to meet or exceed such objectives, as it affects individual employees, depending upon a number of factors such as length of participation, age at retirement, inflation, investment results, and the like.

- By the same token, most employers wish to take Social Security benefits into account so that the combined level of benefits from both sources will produce desired results. Defined contribution plans can be integrated with Social Security benefits to some extent by adjusting contribution levels; however, integration cannot be accomplished as efficiently as is the case under defined benefit plans where such coordination is done on the basis of benefits provided.

- The typical defined contribution plan provides that the employee's account balance is payable in the event of death and, frequently, in case of disability. This, of course, produces additional plan costs or, alternatively, lower retirement benefits if overall costs are held constant. An employer who is interested primarily in providing retirement benefits can use available funds more efficiently for this purpose under a defined benefit plan.

- In the view of many, a more equitable allocation of employer contributions occurs under a defined benefit plan since the employee's age, past service and pay may all be taken into account. In contrast, the typical defined contribution plan allocates contributions on the basis of pay only. Service is sometimes recognized in defined contribution plans; however, its impact, in terms of allocations, is rather minimal. This characteristic of defined contribution plans is one of the reasons it does not lend itself to achieving consistent income replacement objectives.

- A defined benefit plan can be and often is structured to provide a benefit that is related to an employee's final pay, thus protecting the employee against the effects of preretirement inflation. Equivalent protection cannot be provided under a defined contribution plan. Thus, in effect, risk of inflation is assumed by employees who must rely primarily on investment results to increase the value of their benefits during inflationary periods.

- This last comment raises another issue in the comparison of defined benefit and defined contribution plans. Investment risk and reward are assumed by the employer under the former; by employees under the latter. Risk can be minimized by use of selected investment media; absent such protection, however, many people feel that it is inappropriate for the average employee to assume such risk with respect to a major component of his or her retirement security.

The defined contribution approach, of course, is not without its advantages. Deferred profit sharing plans, for example, offer employers maximum flexibility in terms of cost commitment as well as opportunities to increase employee productivity. Through the use of employer securities as a plan investment, greater employee identification with the company and its goals can also be achieved. Also, if the employee group covered is relatively young, the defined contribution plan is apt to have greater employee relations value than would a defined benefit plan.

ERISA has had a significant impact on defined benefit plans. Despite the advantages noted, a defined benefit plan now exposes an employer to significant financial liability if the plan is terminated when there are unfunded liabilites for vested benefits. Up to 30 percent of an employer's net worth is subject to a lien in favor of the Pension Benefit Guaranty Corporation if necessary to meet any liabilities assumed by the PBGC in this event. The lien, since it is in the nature of a tax lien, supercedes the liens of any other creditors. The problems of potential employer liabilities were exacerbated by the Multiemployer Pension

Plan Amendments of 1980 which created substantial liabilities for an employer that wishes to or must withdraw from a multiemployer plan that has unfunded vested liabilities (generally on the basis of the ratio of the employer's contributions to total contributions) and there is generally no limit on the percentage of the employer's net worth that can be used for this purpose.

The vast majority of employees who are not covered by a private retirement program work for smaller companies. According to the Employee Benefit Research Institute, 79 percent of such individuals work for firms that employ less than 100 employees. Clearly, these small employers, as well as newly formed companies, are apt to be reluctant to adopt a defined benefit plan and the liabilities that are automatically imposed by ERISA. Many such employers will find the defined contribution alternative, with no such liabilities, to be a more palatable approach -- despite the advantages offered by a defined benefit arrangement.

That this is so is borne out by IRS statistics on the establishment of new plans. Since ERISA, approximately 80 percent of all new plans are defined contribution in nature. To be sure, many of these new plans (e.g., savings plan) supplement existing defined benefit plans. However, the relative growth of both plans changed abruptly with the passage of ERISA. In fact, the relative growth patterns have just about reversed.

Apart from the plan termination provisions of ERISA and their implicit but significant emphasis on defined contribution plans, it is important to note that the federal government -- knowingly or unknowingly -- has emphasized the defined contribution approach in many other ways. For example:

- The basic structure of the Code, as it applies to HR- 10 or Keogh plans for the self-employed, is strongly oriented toward defined contribution plans. Even though this law was amended to specifically sanction defined benefit plans, the defined contribution approach is still the simplest and easiest way to take advantage of this law. Indeed, almost all such plans have utilized the defined contribution apprpach.

- The IRA concept, instituted under ERISA and substantially enhanced by the Economic Recovery Tax Act of 1981 (ERTA), is totally a defined contribution approach.

- Beginning in 1979, employers were permitted to adopt a Simplified Employee Pension (SEP). A SEP utilizes the IRA concept but has higher contribution limits and considerably less paper work than a conventional retirement plan. Again, the defined contribution approach is mandatory.

- The Tax Reduction Act of 1975 created a new type of defined contribution employee benefit plan -- the investment tax credit employee stock ownership plan, commonly known as a TRASOP. The original law permitted tax credit contributions to those plans only for the years 1975 and 1976. In 1976, the law was amended to extend tax credit contributions through 1983. More recently, ERTA amended the law to provide for the credits through 1987. With this history, it seems reasonable to anticipate continued extensions after 1987.

  The original law provided for an investment tax credit contribution. As a result, only a limited number of TRASOPs were adopted -- primarily by capital-intensive organizations. An interesting change made by ERTA is that beginning in 1983, the tax credit will be determined as a percentage of payroll rather than with reference to investments. As a result, it is expected that many more employers will institute such plans (PAYSOPs) in the future.

- Employee stock ownership plans (which are also defined contribution plans) have also been the subject of special legislation. As is well known, such plans, unlike defined benefit plans, can be involved with corporate debt financing. In addition, ESOPs have been the subject of special legislation -- witness the Regional Rail Reorganization Act of 1973, the Foreign Trade Act of 1974, the Chrysler Corporation Loan Guarantee Act of 1979 and the Small Business Employee Ownership Act of 1980. It seems likely that special interest legislation of this type will recur in the future.

- The Revenue Act of 1978 added a new Section 125 to the Code. This Section permits the adoption of "cafeteria" or "flexible" compensation plans and provides that an employee can choose between taxable and nontaxable compensation elements without problems of constructive receipt if certain conditions are met. One of these conditions is that deferred compensation plans cannot be one of the choices. However, this section was amended to allow the inclusion of profit sharing and stock bonus plans that meet the requirements of Section 401(k) of the Code. Thus, a flexible compensation plan can permit an employee to choose between welfare benefits (e.g., life insurance, disability income, medical expense), cash, or deferred profit sharing or savings plan benefits. Again, we have legislation that will have a tendency to encourage the defined contribution approach. This area is particularly significant since interest in flexible compensation plans is increasing and these plans are very likely to become a major factor in the employee benefit planning process of the future.

Some pressures exist to expand flexible compensation legislation so as to include defined benefit pension plans. Even if this does occur, it is still likely that the emphasis on defined contribution plans will remain. There are very real problems involved in trading defined benefits (particularly if they are pay-related) for current cash or welfare contributions. It is possible to do this, of course, but it will be necessary to resolve issues of equity and the relative value of choices. In many cases, it will be easier to limit employee elections as to how available dollars can be used -- for example, to a choice of purchasing current benefits or of deferring these dollars under some type of defined contribution program. Indeed, it might be said that flexible compensation plans often apply the defined contribution concept to an employer's entire benefit program.

- Closely related to flexible compensation plans are the Section 401(k) cash/deferred profit sharing or savings plans. These plans, of course, are defined contribution. While Section 401(k) was added to the Code by the Revenue Act of 1978, significant interest in these plans was not generated until proposed Regulations were issued in 1981. A key feature of these proposed Regulations is that they permit the use of salary reduction arrangements -- an approach that can be very tax effective and which has captured the interest of many employers. Much of the initial interest, of course, is in the conversion of existing plans. However, the approach presents attractive advantages and it seems likely that many new programs will be enacted. Employers who do not have pension plans may find the combination of tax savings for employees and the lesser financial obligations of the defined contribution approach to be an attractive way of establishing a retirement program. This could be particularly so when tied in with an overall flexible compensation program.

What we have, then, is a significant amount of direct legislative activity that has enhanced the attractiveness of various defined contribution mechanisms. However,other legislation may also have an indirect effect that will encourage the growth of these plans. For example, there is a strong possibility that the Social Security "normal" retirement age will be increased to 68. In addition, workers may be encouraged to remain in the work force beyond normal retirement age if Social Security delayed retirement credits are increased or if the earnings test is liberalized or eliminated.

These changes could affect the planning process associated with defined benefit plans. Most of these plans are designed to produce a specific amount of replacement income, together with Primary Social Security benefits, when an employee reaches age 65. The actual income replacement objectives may vary, but they usually reflect the employee's pay level and length of service. While replacement ratios are generally expressed in terms of before-tax income, they are often consciously set with reference to their after tax value.

The fundamental concept of this planning process revolves around the coordination of two income sources, the private plan and Social Security, at a point in time -- usually the employee's 65th birthday. However, the idea of 65 being a typical retirement age has already begun to diffuse with recent trends toward early retirement. This diffusion will become even greater if the Social Security normal and early retirement ages are changed, especially if accompanied by elimination of permissible mandatory retirement. What may emerge is a concept that retirement age will become highly subjective for each employee and actual retirement may range over a span that begins when employees are in their late fifties and that extends into their early seventies. If retirements become spread over such a wide range, it will become increasingly difficult to maintain a plan design structure that is predicated on the majority of employees retiring at age 65 and the coordination of two income sources at this point in time. Thus, one of the broad but important implications facing employers is the potential need for rethinking their approach to plan design and the basic delivery of retirement benefits. Nonintegrated or indirectly integrated plans and greater use of defined contribution plans are examples of approaches that might be considered. These approaches allow an employer to opt for cost control in lieu of finely tuned benefit levels.

A mandatory private retirement system in the United States is still a long way off -- if, indeed, it ever becomes a reality. Yet the possibility exists that such a system will become law, despite attitudes of the current Administration. The President's Commission on Pension Policy, which filed its report in February, 1981, clearly recommended that a mandatory minimum pension system be established. More specifically, the Commission recommended that this program be in the form of a defined contribution plan with a minimum employer contribution of 3% of compensation. While the Commission did not divulge all of its reasoning in support of this defined contribution recommendation, it is likely that it was perceived as the simplest and most acceptable way of moving into a mandatory system. A mandatory defined benefit program would present a host of issues concerning pay-related benefits, the recognition of prior service, and the imposition of related liabilities.

The prospects of a mandatory private pension system are less than clear at this time. Movement in this direction during the next few years is quite unlikely. But on a long-term basis there is the distinct possibility that some form of pension coverage will become mandatory. If this should happen, the defined contribution approach is most apt to be used. (Defined benefit equivalents would most likely be permitted -- largely to accommodate existing defined benefit plans -- but a defined contribution plan would be the probable choice for employers installing a plan for the first time.) A mandatory private pension system would have major implications for the expanded growth of defined contribution plans.

Despite all of the foregoing, defined benefit plans are alive and well at this time. They are firmly entrenched in major companies and most of the employees now covered by private pensions participate in defined benefit arrangements. It is unlikely that many of these plans will be shifted -- at least completely -- to defined contribution. What might happen, however, is that employers with these plans will hold them at current levels, opting to make benefit improvements via some kind of supplemental defined contribution arrangement -- e.g., a salary reduction, Section 401(k) savings plan. As to those employers who do not yet have a pension plan, we have already seen and can expect to see greater utilization of one form or another of the defined contribution approaches referred to in this discussion. IRAs, PAYSOPs, ESOPs, SEPs, flexible compensation and Section 401(k) plans are all attractive and viable programs to consider. These plans will undoubtedly be enhanced by new legislation -- e.g., higher contribution limits for IRAs and extended and increased payroll-related tax credits for PAYSOPs. While defined benefit plans will remain a major component in the United States private pension system, the defined contribution plan has begun to take on a more significant role and this role is likely to become greater in the years ahead.

Mr. Aglira: Clyde, let me just ask you to comment on something. Conceptually, it seemed that when pension planning started to gain popularity with corporate America, the original concept really evolved from one of an employer gratuity to favored long service employees. Eventually, it started to develop into what you might call a consistent reward for very long service where you saw vesting not occurring until early retirement age and sometimes at normal retirement age. ERISA comes along and now forces the reward concept on shorter service employees primarily those with 10 years of service and now we seem to see the whole pension planning concept drifting from one of setting an objective for a longer service employee to one of deferred compensation for any employee regardless of length of service. It seems to be this deferred compensation concept that is most consistent with defined contribution vehicles. Every employee can see an amount of money put aside. He can see a nest egg continue to grow. I would just ask you for your general reaction to that. Do you think it is true? Do you think this is the way employees are starting to view the pension plan? And, is it going to give us further impetus toward defined contribution vehicles?

Mr. Beers: I think, Bob, that companies and employees will do what is efficient for them in terms of tax structure and to the extent that the defined contribution vehicle now allows employee contributions either through salary reduction or some other form of contribution to be made on a tax effective basis, that will increase the amount of monies going into that kind of a vehicle. On the other hand, I think that there is nothing like a defined benefit plan to do exactly what an employer wants to do and that is to provide an orderly cost-effective way of getting people to retire at an older age. We heard stories in the mid 60's of truck drivers retiring from Sears & Roebuck with a half million dollars in their profit sharing plan only to see in the mid 70's those account balances relative to pay fall dramatically. So a defined contribution plan can be, in itself, very unfair to different generations of employees and consequently I think there will always be a substantial floor over and above Social Security of defined benefits in order for companies to be able to have a consistently moving workforce in terms of turnover. On the other hand, to the extent that we have limitation of retirement ages, to the extent that some employees will want to retire at age 50 and other employees will want to retire at age 75, it is going to be very difficult to plan precisely for those income replacement needs across that wide range of ages and therefore, individual flexibility through defined contributions and through individual tax sheltered savings will occur.

I should expand on this issue of using defined contribution account balances to provide increasing benefits after retirement. This is something that we are very actively working on. There are many problems associated with it including when do you get tax deductions for contributions and how you can merge defined contribution and defined benefit plans. We are very optimistic that this may be a significant vehicle for the future.

Mr. Aglira: I worked with a client recently and he was starting from scratch in his retirement planning. He asked me for the pros and cons of defined benefit plans versus defined contribution plans. I went through the traditional laundry list of items and explained how a defined benefit plan would allow an employer to target specific benefit levels much more precisely, provide much more flexibility and capability with respect to integrating with Social Security. I guess I gave them too much education because after 1 1/2 or two hours had elapsed he said, "Bob, first of all, I don't think we have a past service problem here, we don't have employees in this organization with that much uncovered past service, and we've got a very young group and frankly, you talk about integrating with Social Security and I heard your explanation, but we are all very low paid with one exception whom you are talking to." I hadn't even introduced TEFRA and the fact that TEFRA now cuts back on the ability to integrate in such a way that benefits are channeled strongly toward the higher paid. And he said, "Before you give me your recommendation, I want to give you mine. I recommend that we go with the defined contribution plan." He was, frankly, one of my more astute clients that I've conferred with in my career and I had to agree completely. I did a little post-mortem on that and thought that there are many employers today that are in the very same situation. There are many employers with defined benefit plans today that could easily convert, perhaps, to defined contribution plans, recognizing that there is no past service problem, most of their employees are adequately covered under the existing defined benefit plan that they have, perhaps account balances could be started with existing defined benefit plan assets. There are, of course, interest guaranteed vehicles which would avoid some of the risk that would normally be transferred to an employee in a defined contribution vehicle. Maybe, the only real risk you are left with is wage inflation, and whether there is the ability of the defined contribution account balances to keep pace with that wage inflation. So I've got to believe that it is very much more on the tips of the tongues of the clients, the employers out there that we are going to be dealing with, than has ever been the case in the past.

Let's move on now to Larry Kramer. Larry, is a partner with the law firm of Ballard, Spahr, Andrews & Ingersoll in Philadelphia. He has recenty converted from Pension Attorney to Investment Expert. I kidded Larry this morning and I'll mention it to you; anyone that wants to subscribe to Larry's special gold letter can do so just by coming up and talking to Larry afterwards.

Mr. Larry Kramer: Perhaps the most significant new development in pensions is their impact on the capital markets. Benefit designs come and go, and tax breaks rise and fall. Through it all, however, the gross volume of dollars in the public and private pension system continues to grow. Now, in the violent stock market of September, we may have seen the changeover from a market in which the pension funds participate to a pension system of which the stock market is but a part.

The key to understanding any new development is the metaphor we create for it. All of use use metaphors to explain pensions to our clients and colleagues. You know what I mean: "Think of a pension fund as a pail of water with a spigot," etc. The better a metaphor works, however, the more it may crowd out other, more elegant images that might give rise to other, more elegant thoughts. For example, the physical sciences are rich with metaphors for the pension practitioner, but, because my business associates are rarely scientists, I haven't had the chance to develop those metaphors as fully as I'd like. Thinking about them, however, make me feel much more in touch with the mathematical unity of things. In the hope that it may do the same for you, I am going to use some of these less familiar models to explore the new realities of the capital markets.

Just as a warm-up, let's try out a few physical metaphors. Have you ever asked yourselves why it is so hard to get pension money spread around to a wider variety of capital users? We all use the "herd" image to describe the tendency of plan managers to do much the same thing. Maybe something else is going on, too. So now think of a pension fund as a giant amoeba and its money managers as the membrane through which it reacts to the outside world. One reason too few capital users have access to the funds is that too much money is controlled by too few people. In other words, as any biologist will tell you right off, the surface-to-volume, ratio of each pension amoeba is too low.

Now, when an amoeba gets too big, when its surface-to-volume ratio gets too low, it doubles it by dividing in two. Some pension funds do this, too, but the division is not complete since the same executives retain overall control. I'm not saying that a true division should occur. There may not be enough competent managers to go around, and a manager can't be accountable if he isn't in control. What I am saying, however, is that the concept of surface-to-volume ratio nicely describes the over-centralization of the funds.

Now let's try Newton's second law of motion: f = ma. The force required to change the velocity of a body is proportional to its mass. How much force does it take to get a fund moving in a new direction? I don't know how much it takes, but I'll bet it's roughly proportional to the mass of money involved. As that mass grows, the ability of the investment community to switch a fund from obsolete investments to adaptive ones declines. And once movement starts, the effort required to stop it is enormous. Economists have long recognized the velocity of money. Perhaps it's time to recognize the momentum of investment trends. Of course, it shouldn't be necessary to move the entire investment community, but given the low surfact-to-volume ratio of the pension amoeba...see how easy it is.

With momentum and surface-to-volume ratio under your belts, you are ready for relativity. The Isaac Newton of physical economics was J.P. Morgan. You all recall his first law, given in response to the question "what will the stock market do?" Said Mr. Morgan, "It will fluctuate." In post-Morganic economics, this rule no longer applies. In Morgan's economics, the forces buffeting the market were numerous and unpredictable, and any one of them could cause the market to move. In post-Morgan economics, the mass of the market is so great that it cannot be moved or stopped by traditional market forces. Rather, it moves only in response to, and as a function of its own size.

In the next four decades, the capital markets will ignore classical models in the same way that nuclear particles disobey Newton's law of physics. The market will wobble a bit, but in general, it will go up until 2010 and down until 2030, beyond which, even this arrogant reporter cannot see. In every year of the upswing, the market will rise between June 15 and September 15, no matter what. So reliable will the Summer Rally become that it will begin earlier each year, until it becomes a steady progression of up-months. I make this prediction because the pension funds will soon alter the capital universe to the extent that mere blips like profits and losses will be of no meaning.

As I'm sure you all recall, one premise of Einstein's general theory of relativity is that gravity results when a massive body distorts the space-time continuum. You can't describe how such a body will behave in space-time without recognizing the way in which it will redefine space-time. If you prefer the simplicity of tail-wags-dog, all I'm saying is that you can't share a water bed with an elephant because, as far as you're concerned, a water bed with an elephant in it isn't really a bed any more. The pension funds have so much mass that they can no longer simply participate in the market. Their very presence shapes the market, for increasingly, they are the market.

This inability of the pension funds to tip-toe harmlessly through the capital tulips has some odd but important results. First, cause and effect get reversed. For example, when the pension funds buy stocks, the stock market must by dint of those purchases go up. The fund managers then pat themselves on the back for having caught the updraft. This, of course, is like the ocean congratulating itself on catching the tide. Cause and effect are thus confused, and value - in terms of benefit paying capacity - becomes grossly overstated.

Similar illusions occur on an even grander scale. Think for a moment about what it means to say that a pension plan is "funded". Most of us think of funding as a way to protect ourselves from our employer's failure to pay our benefits. On a national scale, however, funding is nothing more than a swapping of promises. If AT&T and General Motors each have unfunded pension plans with liabilities of $10 billion, we all start thinking "Studebaker". If, however, the AT&T plan holds $10 billion in GM Bonds and GM Plan holds $10 billion in AT&T Bonds, everybody's plan is "funded", and - except for a certain lack of diversification - all's right with the world.

Funding does reduce the chances that a single default will prevent pensions from being paid. It does nothing, however, to increase the productive capacity of the work force or to decrease the share of the GNP needed to pay their parents' pensions. Thus, funding is merely diversification: it allows my employees to look to other people's promises by holding their securities in my pension fund while other people's employees look to my promises by holding my securities in their funds. To some extent, however, the legal compulsion to make promises distorts their value. It is not at all clear that the demand for investment-grade capital will keep up with the pension funds' need to supply it. Consequently, a system-wide increase in the price of investment-grade promises is likely to occur.

Of course, a system-wide increase in the price of things has a name. We call it inflation. You all know that inflation occurs when too much money chases too few goods. But how often do you think of investment capital as the kind of "money" that chases goods or investment assets as "goods" that can be chased. A pension manager can't choose to save or spend; a pension manager must save, and save and save some more. But "saving" just means buying capital assets instead of buying consumables. It's still buying, and it still causes inflation in the goods involved. Here we have $3 trillion coming on line that cannot be spent on anything but goods called real estate and financial assets. How can the price of those goods do anything but rise? What happens to their value is another story.

Here is where relativity comes in. Funding provides security only if our individual choice to fund does not affect the value of our holdings. A rising stock market implies shrewd investing only if our individual purchases don't cause the rise. When we realize, however, that every action pension funds take together changes the effect those actions have, we can see that we have entered the world of Einsteinian economics. It is therefore comforting to know that in the physical world, too, there are limits beyond which traditional principles do not apply.

It seems, then, that we are in for thirty years of an unprecedented bull market in the nominal price of everything. But why not? The generation that made the hoola-hoop, rock 'n' roll, the anti-war movement, and the self-centered seventies is now saving for retirement. We war-babies do everything in a big way, and saving will be no exception. If we can just get ahead of the Federal Government's voracious appetite, we're going to flood the country with investment capital. And get ahead we will: after all, much of what the Government borrows now goes to service the national debt. When interest rates drop, Federal borrowing to pay interest drops with it, and so on, in a benign spiral.

The bull market itself, by lowering capital costs, will lead to extraordinary prosperity. But then it will be 2010 and the economic balloon will surely collapse. It will collapse because the engine that inflated it will have overwound its demographic rubber-band. The system will then move rapidly in the opposite direction as the workers of 2010 are forced to protect the purchasing power of their dollars against competition from the claims of their retired predecessors.

The physical model here is equilibrium. The economic system always moves in the direction of a socially acceptable equilibrium in purchasing power between its productive and nonproductive sectors. Until recently, the operative mechanism has been that politicians make generous promises to the non-workers and the workers devalue those promises by triggering a round of inflation. This is really not a bad approach: the politicians get credit for generosity, and the Arabs, the unions, and big business get blamed for the inflation.

Unfortunately, this mechanism requires two conditions to work. First, non-worker benefits cannot be fully indexed for inflation. If they are, equilibrium cannot be restored, the center fails to hold, and the economy flies off into the hyper-space of hyperinflation. Second, there must not be drastic demographic shifts. Such shifts distort equilibrium so badly that the inflationary "adjustment" is too painful to be politically acceptable. At that point, the workers stop working, and we have deflationary depression.

The darker view of 2010, therefore, is that (1) we have already indexed Social Security benefits and may be tempted by low inflation and low interest rates to index private pensions as well; and (2) the war-babies are like an extra weight on the pendulum, so that the swing to the generous side in 1995 may be too wide and the inflation needed to correct things in 2010 may be too great to permit.

One reason I like the equilibrium model is that it focuses attention on indexing better than most other metaphors. We have come to think of indexed benefits as an expensive luxury. Perhaps we should instead think of them as a deceptively cheap destabilizer.

Indexed benefits are likely to develop only to the extent indexed investments can be found to fund them. Indexed financial instruments have so far not won wide acceptance in the U.S., but they are affordable for homebuyers. We may, therefore, see much more loans in the future. If so, indexed benefits may not be far behind.

These indexed investments may be exactly what is needed in the short run, since they make possible transactions that would otherwise not occur. In the long run, however, full indexing poses serious problems, and herein lies the real problem. For plan participants the best plans in 2010 will be indexed, and the greater the number of indexed plans there are, the more important it will be to be covered by one of them. At the same time, however, the extent to which plans and benefits in general are indexed will greatly affect the ability of the system as a whole to survive. If this analysis is correct, each of us has every reason to act directly counter to the interests of society.

Here is the matrix as I see it. If pension funds make indexed investments and pay non-indexed benefits, the pensioners will lose as inflation ravages their benefits, but the rest of the economy will survive. If the funds make non-indexed investments and pay indexed benefits, pension defaults may trigger economic collapse. If both pensions and investments are indexed, hyperinflation will destroy the economy. If neither pensions nor benefits are indexed, I see rough sledding in the market crash, but nothing like the disaster that will befall us if pensions alone are indexed. Those of you who are into game theory may want to consider whether individual employees, employers, borrowers, and governments should turn to indexing for the benefits it offers at the price it must eventually exact.

If there is a point to all this, it may be that pension actuaries now face a forty-year period in which the relationship between demographics and economics will be felt more directly than in any time any of us can remember. The movement of the investment markets in this period may even be so dominated by one parameter - pension fund size - that you will be able to construct a useful predictive model of its performance. If you do not construct such a model, you may look first like conservative nannies and later like speculative ninnies. I urge you to think about these issues, run a few computer programs, and advise your clients accordingly. Then, in 2010, if I have been right, and funds appear from their nominal values to have produced a real return of 10%, consider your advice about 2020 very carefully. And remember Newton's first law: every action has an equal and opposite reaction.