JOBS IN PERIL:

ASSESSING THE IMPACT OF INCREASES IN DEFINED BENEFIT PLAN FUNDING OBLIGATIONS ON EMPLOYMENT DURING AN ECONOMIC RECESSION

An Issues Analysis and Review of Academic Research

Prepared for

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I. Overview and Executive Summary

Overview of the Problem

The economic crisis of the last two years has had adverse impacts on every sector of the American economy, with a particularly negative impact on equity investments and employment. According to a paper published by the Center for Retirement Research at Boston College, retirement savings of all forms in the United States lost approximately $4 trillion from October 2007 to October 2008.[1]

Individuals who participate in defined benefit pension plans are generally insulated from the losses attributable to the economic meltdown on retirement savings because their employers bear the risks of investment losses on plan assets. However, the employers sponsoring defined benefit plans must make up any shortfalls in plan funding with additional contributions. Because of the sudden and substantial decline in the value of investments in the United States, the funded status of defined benefit pension plans dropped precipitously during 2008.

A 2008 Center for Retirement Research paper concludes that "funding requirements that compel companies to increase their contributions dramatically during a recession increase the likelihood of layoffs and terminations."

Watson Wyatt Worldwide calculates that defined benefit plans had an average measured funded status of 96.4 percent for the 2008 plan year, resulting in required employer contributions of approximately $37.9 billion.[2] This funded status is projected to drop to 83.8 percent for 2010 and 76.8 percent for 2011.[3] This drop in funding status will trigger additional funding requirements for the employers who sponsor these plans. These declines could result in employer contributions of $89 billion in 2010 and $146.5 billion in 2011.[4] Thus, employer contributions for 2010 could be nearly 2.5 times the 2008 levels and for 2011 could be nearly 4 times the 2008 levels, creating significant challenges for those employers that sponsor defined benefit pension plans.

A recent survey of defined benefit plan sponsors by Aon Consulting found that 68 percent of employers indicated that unexpected cash needs associated with their defined benefit plans would cause the employer to make other cuts, including cuts in the areas of hiring and workforce training.

As a consequence of these potential funding requirements, cash-strapped companies are faced with the challenge of diverting to their defined benefit plans substantial amounts of money that could be used by these companies for productive capital investment. The employers who have made a long-term commitment to provide a defined benefit plan for their employees now face increases in their defined benefit funding obligations that

[1] Munnell, Alicia H., Jean-Pierre Aubry, and Dan Muldoon. *The Financial Crisis and Private Defined Benefit Plans.* Center for Retirement Research at Boston College. November 2008, Number 8-18.

[2] *Statement of Mark Warshawsky, Director of Retirement Research, Watson Wyatt Worldwide, Arlington, VA.* Testimony Before the House Committee on Ways and Means, October 1, 2009.

[3] *Id.*

[4] *Id.* These amounts do not include additional contributions of approximately $3 billion 2010 and $11.5 billion in 2011 that are required by some plans to avoid benefit restrictions at the 80 percent funded status level.

threaten both the existence of these employers and the jobs of their employees. These extraordinary pension funding requirements potentially threaten the continued viability of those employers who sponsor defined benefit plans and could derail the economic recovery by forcing these employers to either severely curtail their capital investments or make further reductions in their workforces. At a time when the economic recovery is fragile and unemployment rates are still high, such a result could have a devastating effect on the millions of American workers who work for employers with defined benefit plans.

Some have argued that these problems are illusory. They argue that it does not matter what happens to any one employer, but rather what happens in the entire economy. They argue that cash contributed to pension plans is reinvested in the capital markets so there will be no reduction in total supply of capital in the economy.[5] They further argue that maintaining the overall capital supply will sustain employment levels even if employers who sponsor defined benefit pension plans make further cuts in their workforces.

In order to address these arguments, this paper examines the existing economic research on the impact of employer funding obligations for defined benefit plans on capital expenditures and employment levels.

Increases in Pension Funding Obligations Decrease Firm-Level Capital Investments and Employment

Employers who have continued to maintain their defined benefit plans face unprecedented cash flow challenges created by the recession and the freefall of the capital markets. However, the recession creates funding problems for defined benefit plans from two important sources – markedly lower asset values and precipitously higher liabilities.[6] The Center for Retirement Research paper concludes that "funding requirements that compel companies to increase their contributions dramatically during a recession increase the likelihood of layoffs and terminations."[7]

Academic research confirms a link between contributions to defined benefit pension plans and employer capital expenditures and employment levels. Rauh (2006) found a decrease in capital expenditures of 60-70 cents for each dollar of mandatory defined benefit plan contribution. Soto (2008) found that, in years of contraction, defined benefit plan funding requirements are responsible for 4 percent of the reduction in employment.

Academic research confirms that there is a link between defined benefit plan funding requirements and a firm's capital investments and employment levels. Rauh (2006) found that contributions to defined benefit plans have a direct impact (constraint) on a company's internal financial resources and that these constraints represent an inability of the firm to raise funds for

[5] Gold, Jeremy and Daniel P. Cassidy. *Congress should resist push to delay pension contributions.* Pensions & Investments, November 24, 2008, available at www.pionline.com.

[6] The decrease in asset values is a direct result of the financial market crisis. The increase in liabilities is a direct result of the low interest rates maintained by central banks that are intended to help turn the recession into recovery.

[7] *Munnell, Aubry, and Muldoon, supra.*

desired investments.[8] The measured decrease in capital expenditures was 60-70 cents for each dollar of mandatory defined benefit plan contribution.

Soto (2008) shows that defined benefit plan funding requirements have a direct effect on a firm's employment levels.[9] Soto's research found that, in years of contraction, defined benefit plan funding requirements are responsible for 4 percent of the reduction in employment. Soto noted that this reduction in employment was "remarkably similar" to the aggregate effect of pension contributions on capital expenditures calculated by Rauh. Soto also found a link between defined benefit plan funding levels and employment volatility. Soto states that, "for macro policy, the results mean that policies that reduce the amount of cash available to firms are likely to increase lay-offs."

A recent survey of defined benefit plan sponsors by Aon Consulting confirms Soto's conclusion.[10] This survey found that 68 percent of employers indicated that unexpected cash needs associated with their defined benefit plans would cause cuts outside of the plan including cuts in the areas of hiring and workforce training.

Increased Defined Benefit Plan Funding Obligations Adversely Impact Job Creation in the U.S. Economy

One article (Gold and Cassidy) suggests that the increased capital investment that results from the pension funding contributions required will create new jobs that will offset any potential job losses that occur from the employers required to increase funding of their defined benefit plans.[11] Gold and Cassidy assert that (1) defined benefit plan contributions translate dollar-for-dollar into new capital investment and, by implication, new jobs in the U.S. economy, (2) tax deductibility of the contributions reduces the costs to employers, and (3) the current rules allow employers to defer their required contributions long enough for the economy to recover.

First and foremost, this article ignores the effect that the substantial increases in defined benefit funding requirements will have on the firms that maintain defined benefit plans. During a period when the U.S. economy is on shaky ground and unemployment levels are at extraordinary highs, the current law rules threaten the continued viability of companies solely based on their long-standing commitment to providing a defined benefit plan for their employees.

Furthermore, the assertions made by Gold and Cassidy fail to reflect the following economic realities:

- Capital markets do not act perfectly even in a robust economy, but particularly in an economy marked by tight credit markets, uncertainty in the mortgage markets, and record levels of unemployment;

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8 Rauh, Joshua. *Investment and Financing Constraints: Evidence from the Funding of Corporate Pension Plans.* Journal of Finance. 61(1): 33-71, 2006.

9 Soto, Mauricio. *The Effects of Pension Funding Rules on the Behavior of Firms.* Boston College, Graduate School of Arts and Sciences, Department of Economics. May 2008.

10 Aon Consulting, "Ready 2012 Pulse Survey, June 2009.

11 *Gold and Cassidy, supra.*

- Employers faced with unprecedented defined benefit plan funding requirements must begin to make adjustments to their workforces and capital investments now in order to save enough money to meet their 2010 and 2011 funding obligations; thus, layoffs and reductions in capital investments will come at exactly the wrong time as the economy begins to recover;

- Unemployment levels are expected to continue to rise into 2010 and stay high well into 2011, meaning that job losses that result from the unprecedented levels of defined benefit plan funding will not be made up immediately in other sectors of the economy;

- Dollars that are contributed to defined benefit pension plans will not be fully invested in U.S. capital markets because approximately 15 percent of defined benefit plan assets are invested in foreign equities and fixed income securities;

- The tax benefits of contributions to defined benefit plans are overstated because often the very firms facing large funding obligations cannot use these tax benefits currently and the contributions may take the place of other tax-favored investments; and

- Many economists believe that the economic recovery will be "jobless," suggesting that job losses that occur as a result of the stress on employers that maintain defined benefit plans may be permanent job losses to the U.S. economy.

What Will Happen to Workers Covered Under Defined Benefit Plans?

The Center for Retirement Research paper (CRR 2008) states that "the financial crisis could force some companies to lay off workers, push some plan sponsors into bankruptcy, or persuade some healthy companies that no longer want to bear this type of financial risk to freeze their plan." Under each of these scenarios, employees face serious consequences of these actions.

Because of the projected increases in defined benefit plan funding requirements, employees who work for employers with defined benefit plans face a higher risk of being laid off than workers in other firms. In addition to the devastating impact of unemployment in the current economic climate, an employee who loses his or her job will likely have a gap in his or her working career during which no retirement savings are being accumulated. If the employee finds another job, it is statistically more likely than not that the employee will not be eligible to participate in a defined benefit plan of the new employer.

> *The challenges facing workers who lose their jobs in the current economy should not be minimized. Even under robust economic conditions, workers who lose their jobs, particularly those who lose jobs in industries in which the job losses may be permanent, face gaps in employment. During these gaps in employment, it is unlikely that these workers will save for retirement, which reduces their future retirement security. Further, and more troubling, these workers may be forced to tap into their existing retirement savings in order to meet current consumption needs.*

If the employer goes bankrupt, in addition to losing his or her job, the employee will only be entitled to benefits under the defined benefit plan up to the amount guaranteed by the Pension Benefit Guaranty Corporation (PBGC) (or the amount that can be provided with plan assets, if greater). The employee faces the same uncertain job market and the likelihood of a gap in retirement savings accumulations. If the employer freezes the defined benefit plan to limit overall liability for benefits, the employee is only entitled to benefits accrued up to the date the plan is frozen.

The challenges facing workers who lose their jobs in the current economy should not be minimized. Even under robust economic conditions, workers who lose their jobs, particularly those who lose jobs in industries in which the job losses may be permanent, face gaps in employment. During these gaps in employment, it is unlikely that these workers will save for retirement, which reduces their future retirement security. Further, and more troubling, these workers may be forced to tap into their existing retirement savings in order to meet current consumption needs.

Other Countries Have Recognized the Need to Give Companies More Time to Address Funding Shortfalls

The meltdown of the financial markets caused problems for defined benefit plans around the world similar to those faced by plans in the United States. Some countries have addressed these problems head on. Both Ireland and Canada have provided temporary relief from defined benefit plan funding requirements to help employers during the current economic crisis. The regulatory impact analysis statement that accompanied the Canadian regulations stated "the current economic environment is placing significant stress on many plan sponsors, who could affect the viability of defined benefit pension plans and benefit security. The relief that will be provided ... recognises the potentially negative impact of funding pension deficiencies on the sponsor."[12]

Conclusions

The potential increase in pension funding obligations will have a negative effect on aggregate job creation in the economy. The timing of a full economic recovery is still uncertain, but economists believe that the recovery could be jobless and that unemployment levels will continue to rise into 2010 and will remain high well into 2011. In this environment, it is naïve to expect that job losses from employers that sponsor defined benefit plans will be made up in other sectors of the economy.

Furthermore, the potential increase in funding obligations will have significant deleterious effects on the affected companies, resulting in long-term ramifications for those industries in which defined benefit plans have been the primary form of retirement plan. Requiring employers to increase their funding to defined benefit plans during a recession leads to layoffs and bankruptcies, suggesting that the pension funding obligations could fundamentally alter the distribution of jobs in the economy based upon what industries have made long-standing commitments to defined benefit plans.

[12] *Solvency Funding Relief Regulations, 2009.* Regulatory Impact Analysis Statement. Department of Finance Canada. News Release 2009-059, June 12, 2009.

II. Employers Face Unprecedented Defined Benefit Funding Obligations

Watson Wyatt Worldwide calculates that defined benefit plans had an average measured funded status of 96.4 percent for the 2008 plan year, resulting in required employer contributions of $37.9 billion.[13] This funded status is projected to drop to 83.8 percent for 2010 and 76.8 percent for 2011. This drop in funding status triggers additional funding requirements for the employers who sponsor these plans.

In his testimony before the House Committee on Ways and Means on October 1, 2009, Mark Warshawsky, Director of Retirement Research for Watson Wyatt Worldwide, estimated that funding requirements for private defined benefit plans would be about $32 billion for the 2009 plan year, but would increase to $89 billion for the 2010 plan year and a staggering $146.5 billion for the 2011 plan year.[14] Thus, employer contributions for 2010 could be nearly 2.5 times the 2008 levels and for 2011 could be nearly 4 times the 2008 levels, creating significant challenges for those employers that sponsor defined benefit pension plans.

The unprecedented defined benefit funding obligations that employers face result from the implementation of the Pension Protection Act of 2006 (PPA) at exactly the time that the U.S. economy faced a crisis of proportions that had not been seen in decades. The defined benefit funding rules under the PPA went into effect in 2008 just as the financial crisis hit. As a consequence, cash-strapped companies are faced with the challenge of diverting substantial amounts of assets to their defined benefit plans at a time when the economy remains weak and the recovery slow.

13 *Statement of Mark Warshawsky, supra.*
14 *Id.*

III. Increases in Pension Funding Obligations Decrease Firm Level Capital Investments and Employment

As noted in the previous section, employers who have continued to maintain their defined benefit plans face unprecedented cash flow challenges relative to their counterparts with defined contribution plans merely because of the freefall of the capital markets. Employers with defined benefit plans that were fully funded in 2007 now face substantial unanticipated funding requirements. The Center for Retirement Research paper explores the effects of the current financial crisis on defined benefit plan sponsors and participants.[15] The authors conclude that "funding requirements that compel companies to increase their contributions dramatically during a recession increase the likelihood of layoffs and terminations."[16]

A recent paper published by the Organization for Economic Cooperation and Development (OECD) examining the effects of the worldwide economic crisis on pension markets suggests that a longer term, more balanced view of the problem should guide decision makers:

> "Although the short-term impact is evidently negative, pension funds, by their very nature, have to work with a long time horizon and their performance should also be evaluated on this basis. If one looks at returns over the last fifteen years – up to October 2008 – a positive picture still emerges. For example, the average, annual real rate of return of pension funds was 8.5% in Sweden and 6.1% in the United States and the United Kingdom over this period."[17]

The reality is that the stresses resulting from significant increases in pension funding obligations can have a significant and measurable effect on the affected employers at a time when the economy is weak and unemployment levels are at historic levels. The employers who made a long-term commitment to provide a defined benefit plan for their employees now face increases in their defined benefit funding obligations that threaten both the existence of these employers and the jobs of their employees. Often, these plans are maintained by companies in industries that are particularly challenged under the current economic situation. Research has quantified the effect that increases in defined benefit plan funding requirements have both on an employer and on employees. Required defined benefit plan contributions can adversely affect a company's ability to finance capital investment, can decrease employment levels, and can lower profits.

[15] Munnell, Aubry, and Muldoon, supra.
[16] *Id.*
[17] *Pension Markets in Focus.* OECD, December 2008, Issue 5.

Pension Funding Requirements Reduce the Ability of Firms to Make Capital Investments

Recent research by the International Monetary Fund (IMF) acknowledges the practical issues of firm access to capital.[18] Specifically, the IMF study considers the impact of pension contributions on a company's ability to raise capital. The report states

> "…losses on pension fund assets may increase the need to resort to costly external financing, inducing the firm to cut back on current production. An extreme case of this problem is that of a credit-constrained company. For such a company, the need to finance the pension shortfall would crowd out investment or working capital one-for-one."[19]

The IMF Working Paper addressed the challenges that employers face when there are losses on the assets in their defined benefit pension plans. The IMF paper finds that "in the case of both large and small firms, losses on pension fund assets lower profits and cash-flows, which may make it more difficult for ... firms to access external capital markets, causing them to reduce activity."[20]

In a 2006 paper, Dr. Joshua Rauh examined the effects of pension funding obligations on capital expenditures by companies.[21] Consistent with the IMF working paper, this research found that required pension contributions create an inverse relationship between capital expenditures and external financing. In other words, the more heavily a firm relies on debt financing, as required pension contributions increase, capital expenditures will decrease. Rauh found that contributions to defined benefit plans have a direct impact (constraint) on a company's internal financial resources and noted that the data suggests that these constraints represent an inability of the firm to raise funds for desired investments. Defined benefit plan sponsors decrease spending on capital expenditures in response to the reduction in internal resources caused by required pension contributions. In Rauh's paper, the measured decrease in capital expenditures was 60-70 cents for each dollar of mandatory defined benefit plan contribution.

Pension Funding Requirements Reduce Employment Levels

Academic research also demonstrates the correlation between defined benefit plan funding requirements and employment levels. The IMF Working Paper found differences in the effects of pension funding requirements on the demand of employers for labor depending upon the size of the firm.[22] The paper noted that laws that require firms to prefund their pension obligations increase the marginal cost of labor if the expected returns on the pension fund assets is smaller than the internal rate of return for the firm.[23] The paper found that, "in the case of small firms belonging to industry-wide pension plans … as contributions rise and fall, reflecting losses or gains on pension fund assets, so does the marginal cost of labor, and labor demand from these

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[18] Detragiache, Enrica. *Company Pension Plans, Stock Market Returns, and Labor Demand.* IMF Working Paper, WP/03/222, November 2003.
[19] *Id.*
[20] *Id.*
[21] *Rauh, supra.*
[22] *Id.*
[23] *Id.*

firms tends to be more pro-cyclical."[24] In the case of large firms, the IMF paper found that a low rate of return on pension assets may make labor more expensive.[25]

Empirical estimation of the relationship between required pension funding and employment was undertaken by Robert F. Wescott using the INFORUM macroeconomic model.[26] The estimation found that a significant increase in required pension contributions would not only decrease investment, but would also reduce employment in the economy. While the analysis is not directly comparable to the current situation, Wescott found that increasing the volatility of defined benefit plan contributions would have cost the United States more than 300,000 jobs in 2003.

Later research further explored more directly the impact of defined benefit funding requirements on employment levels. In a dissertation published in May 2008, Mauricio Soto shows that defined benefit funding requirements have a direct effect on employment levels.[27] In particular, Soto found that exogenously determined changes in pension funding requirements decrease the demand for labor. In this case, such an exogenous event as the collapse of equity markets would create an unanticipated change in pension funding requirements. Soto notes that the relationship between pension rules and employment highlights the effect of the availability of cash on fundamental firm choices. Soto found that the additional contributions made to underfunded pension plans reduced cash flow of these firms by about two percentage points. If the effects of pension funding requirements were completely offset by corporate dividend payments, additional pension contributions would reduce dividend payments by 15 percent.

Soto's research finds that, in years of contraction, pension funding rules are responsible for 4 percent of the reduction in employment. Looking at the contraction that occurred in 2000-2001, Soto found that additional contributions to defined benefit plans accounted for 3.2 to 4.7 percent of the employees laid off by during this time period. A similar analysis for the 2003-2004 contraction period found that the additional contributions to defined benefit plans accounted for 3.9 to 5.8 percent of the total reduction in employment.

Soto found that the 4 percent reduction in employment caused by defined benefit funding requirements was "remarkably similar" to the aggregate effect of pension contributions on capital expenditures that was calculated by Rauh.

Soto also found that defined benefit plans affect employment volatility. His research found that firms with underfunded defined benefit plans have high volatility in employment levels. In his conclusion, Soto states "for macro policy, the results mean that policies that reduce the amount of cash available to firms are likely to increase lay-offs."[28]

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[24] *Id.*
[25] *Id.*
[26] Wescott, Robert F. *Pension Smoothing Changes Would Worsen Job Losses in Recession,* An Analysis for the Business Roundtable Pension Reform Study Group, February 28, 2005.
[27] *Soto, supra.*
[28] *Id.*

A recent survey of defined benefit plan sponsors with frozen defined benefit plans by Aon Consulting found that 68 percent indicated that unexpected cash needs associated with their pension plans would cause cuts outside of the plan.[29] The respondents indicated that these organization cuts would include the areas of hiring and training in the workforce.

[29] *Aon Consulting, supra.*

IV. During a Recession, Increased Pension Funding Obligations Adversely Impact Job Creation in the U.S. Economy

The academic research quantifies the adverse impact that increased pension funding obligations will have on capital investment and employment at the firm level. In addition, the increases in defined benefit funding that will occur in 2010 and 2011 as a result of the interaction of the recession and the PPA will cause additional job losses in the U.S. economy at exactly the wrong time as the economy tries to recover from the recession. Employee advocate groups such as the Pension Rights Center and the AFL-CIO recognize the challenges employers will face with substantial increases in defined benefit plan funding, share the concerns for the adverse impact of drastic increases in pension funding and support the concept of providing short-term funding relief to defined benefit plan sponsors.[30]

Gold and Cassidy suggest that the increased capital investment that results from the pension funding contributions required under the PPA will create new jobs that will offset any potential job losses that occur from the employers required to increase funding of their defined benefit plans.[31]

Gold and Cassidy specifically assert the following:

- Pension contributions are reinvested immediately in capital securities markets and these contributions translate dollar-for-dollar into new investment capital in the U.S. economy[32];

- Tax deductibility of pension contributions reduces costs to employers, because the Federal and state governments cover the difference; and

- Current funding rules allow employers to defer their increased defined benefit plan contributions into 2010 and 2011, implying that this gives the affected employers ample time to recover from the effects of the recession, thereby alleviating the potential for additional job losses.

Undoubtedly, pension assets add significantly to investment capital. Nonetheless, arguments by Gold and Cassidy rely on either overly simplified economic theory or fallacious arguments that obscure the complexity of the current situation. They also discount the true potential for

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30 *Statement of Norman P. Stein on Behalf of the Pension Rights Center on Defined Benefit Pension Plan Funding Before the Committee on Ways and Means United States House of Representatives.* October 1, 2009. *Statement of Damon Silvers, Associate General Counsel, AFL-CIO.* Testimony Before the House Committee on Ways and Means, October 1, 2009.

31 *Gold and Cassidy, supra.*

32 This reference to new investment allegedly supports the argument that new investment will create new jobs to compensate for those jobs lost as a consequence of bearing the burden of the increased defined benefit plan contributions.

economic hardship and increased job losses that can occur if employers are forced to make extraordinarily large contributions to their defined benefit pension plans just as the economy is struggling to recover. The arguments fail to account for the complexities associated with capital investment during a recession. It is helpful to review each argument in light of the economic reality of the current economy.

A. Defined Benefit Plan Contributions and Capital Investment

The Argument

The principal argument against defined benefit plan funding relief suggests that providing relief to defined benefit plan sponsors during the economic recession is not necessary because the cash contributions made to satisfy defined benefit plan funding obligations will result immediately in increased capital investment in the economy and this increased capital investment will create new jobs that will offset any job losses that occur in the companies required to make the increased contributions.

This argument contends that the potential adverse impact on a single firm (from meeting the funding requirements) will not matter in the aggregate because the money contributed by one company will find its way through capital markets to those companies with the most productive investment opportunities. These opportunities, in turn, will create jobs that will offset any job losses that result from the increased funding obligations.

The article states that "$1 billion in contributions = $1 billion in investment capital."[33] This argument assumes that (1) U.S. capital markets are closed (i.e., all of the dollars will be reinvested only in domestic investments), (2) there is a uniform impact of the investment dollars (loss of investment to the contributing firm and new investment from the productive opportunity), and (3) capital markets are operating perfectly and instantaneously.

The Economic Reality

This argument implies that the movement of pension contributions into new investment capital is seamless and, by further implication, instantaneously creates new jobs. Even in periods of robust economic growth, there are costs and asymmetric responses to defined benefit plan contributions that can delay investment and produce uneven results. Further, during recessionary periods characterized by weak economic growth and an absence of jobs creation, these arguments no longer hold valid. The increased defined benefit funding requirements could be the final nail in the coffin of employers in some particularly troubled industries. The demise of these employers would have long-term consequences for U.S. workers and the U.S. economy.

The argument against defined benefit plan funding relief relies on economic theory that indicates that capital will move freely from one market to another following the influx of capital investment. However, for this to occur with dollar-for-dollar symmetry, the domestic capital markets must operate perfectly and remain closed to foreign investment.

[33] *Gold and Cassidy, supra.*

During the 2008 financial crisis, capital markets showed signs of failure. Lending halted precipitously during the summer of 2008. Commercial credit was not available to large corporations, business lines of credit were withdrawn, and mortgage markets collapsed making credit difficult and in some cases, impossible to obtain. As a result of the continuing stress on financial markets, tight credit markets continue and many businesses face difficulties in obtaining debt financing. Thus, despite economic theory, capital markets do not operate perfectly, particularly in times of recession.

As a result of the recession, the U.S. economy faces continuing challenges that continue to threaten the timing and extent of a recovery. In the context of these challenges, failure to address the large defined benefit plan contributions that employers will be required to make in the short term could delay or derail an economic recovery. Among the problems that remain for the U.S. economy are the following.

- Record levels of unemployment – most economists believe that unemployment levels are still rising and will not begin to stabilize, much less decline, before the middle of 2010.[34]

- Tight credit markets despite record low interest rates – Short-term commercial lending markets appear to be working. However, there is simply not sufficient credit, particularly in the small employer market, which is responsible for a significant percentage of job creation, to generate enough jobs to accommodate the impact of pension funding on job loss.

- Uncertainty in the mortgage markets, both housing and commercial markets – Many economists express concerns over the housing market and the rate of foreclosures. They believe that the programs put in place as part of the stimulus package have only deferred many individual foreclosures. Likewise, as the U.S. economy remains slow, many commercial mortgages are believed to be at risk as well.

- Increasing corporate earnings, but no strong correlation to sustainable growth – One sign of recovery that many identify is the increase in corporate earnings. However, a recent Wall Street Journal article cautions that corporate earnings do not correlate with economic growth.[35]

- Growing U.S. deficit and overall debt level – One consequence of the fiscal stimulus and bank stabilization legislation is the contribution to the Federal debt level. As with many other countries, the United States faces record deficits and debt levels. High deficits and debt levels create two concerns. First, they often lead to increased income taxes which could further stifle a recovering economy. Second, they raise concerns about the underlying economic strength once the stimulus programs are withdrawn.

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[34] See the discussion of this issue in Part C., below.
[35] The Wall Street Journal, Zachary Karabell, "Corporate Earnings are No Sign of Recovery," August 9, 2009.

Thus, while there has been cautious optimism in recent months, many economists believe that the recession will be slow to end. A July 2009 report by the IMF indicates that the recession affecting the U.S. economy and the world economy has not ended, despite positive signs of improvement.[36] The world economy is expected to emerge from the recession by the end of 2009 or early 2010. However, the IMF expects the recovery to be slow for three reasons. First, in most countries, the financial systems remain impaired. Second, the benefits from the fiscal stimulus policies implemented by many countries will gradually diminish. Third, the fiscal stimulus policies created substantial deficits that increased the overall debt levels of major developed-country economies. Finally, in response to declining asset prices (and declining household wealth), many countries are observing a significant increase in their national savings rates and a decrease in personal consumption. This low consumer spending rate correlates inversely with the high unemployment rates experienced by many countries, particularly the United States.

The IMF world economic outlook suggests that there continue to be impairments to the capital markets that will make it less likely that a defined benefit plan contribution by one employer will be immediately translated into new jobs by another employer in the United States.

Furthermore, employers faced with unprecedented defined benefit plan funding requirements must begin to make adjustments to their workforces and capital investments now in order to save enough money to meet their 2010 and 2011 funding obligations. Layoffs and reductions in capital investments will come at exactly the wrong time as the economy begins to recover. As the Chairman and CEO of NCR Corporation stated in testimony before the House Ways and Means Committee: "As a business, we must undertake steps NOW to reserve cash for this very large liability. Our creditors, investors, and want to know NOW how we will pay for this liability…As an example, if a company has to set aside $100 million for its pension plan in one year, that's equal to 2,000 employees earning $50,000 a year."[37] At a time when unemployment rates are continuing to rise, employers may be forced to lay off even more workers to save enough money to meet their future defined benefit plan funding obligations. However, if unemployment rates are still rising, it is unlikely that these layoffs and reductions will be immediately countered by job hires in other sectors of the economy.

Further, investment does not remain in the domestic markets only. In fact, capital markets are open to foreign investment and pension assets have held an increasing portion of foreign assets. These holdings indicate that, while they may earn a higher rate of return, there is a net outflow of capital that will not contribute to new capital investment as a result of the contributions. A recent Pensions & Investments survey finds about 15 percent of corporate defined benefit plan assets are invested in foreign equities and fixed income securities.[38] While some of this "outflow" of capital investment to foreign markets may be recouped by foreign investment in the

[36] See the International Monetary Fund, World Economic Outlook, July 8, 2009.

[37] *Testimony of Mr. William Nuti on Behalf of American Benefits Council Before the Committee on Ways and Means of the U.S. House of Representatives for the Hearing on Defined Benefit Plan Funding Levels and Investment Advice Rules.* American Benefits Council, October 1, 2009.

[38] *The P&I 1,000 Largest Plan Sponsors*. *Average assets mixes, DB plans.* Pensions & Investments, January 26, 2009. Available at www.pionline.com. This result is consistent with the results in a separate survey conducted by Plansponsor.com, which found that defined benefit plans had approximately 17 percent of assets invested in non-U.S. equities in 2007. *2007 Defined Benefit Survey.* May 2007. Available at www.plansponsor.com.

United States, it is not clear that this "inflow" will offset the "outflow" completely and immediately, particularly under the current economic climate.

B. Tax Deductibility of Pension Contributions

The Argument

A second argument is that the favorable tax treatment of the pension contributions ameliorates the adverse impact on the contributing companies. Also implied in this argument is that, because of the tax benefits, a contribution to a defined benefit plan is a preferred way to finance new investment because "$1 billion in contributions costs a contributor in a 40% total bracket only $600 million (the federal government chips in $350 million and local governments another $50 million) but it provides a full $1 billion in new capital investment to other companies."[39]

The Economic Reality

While the argument that deductibility of the defined benefit plan contributions reduces the cost of such contributions to the firm is true, empirical evidence suggests that the benefit often does not coincide with the contribution. The strength of this argument relies on an assumption that the firm making the defined benefit plan contributions is subject to tax at the highest marginal tax rates on its income. In this situation, firms paying the maximum marginal tax rate on business income would receive the greatest reduction in their tax liability for their defined benefit plan contributions. But those firms that do not have net income or have net operating loss carryovers would receive no current tax benefit from the deductibility of the contributions.

Even in times of economic prosperity, not all employers are able to utilize currently the tax benefits of the deduction for contributions to a defined benefit plan. Thus, in many cases, the timing of the tax deductibility may occur many years after the required defined benefit plan contribution. This timing issue occurs when the firm experiences a net operating loss or is carrying over past operating losses. In these situations, the firm lacks adequate income to claim the pension contribution deduction.

In addition, the argument presupposes that a corporation's alternative use of the money contributed to a defined benefit plan would not be tax favored, which would not be true in many cases, such as investments in research and development or investments in renewable energy projects, which have tax-favored treatment. In fact, a corporation's alternative use of the money might be more tax favored than the contributions to a defined benefit plan.

Finally, $1 billion of new investments requires $1 billion of cash from some source. The argument ignores the fact that federal and local governments finance the investment to the extent of any tax benefit. When the government confers a tax benefit, this reduces tax receipts. Therefore, the government conferring these tax benefits must forego other uses of the funds, possibly reducing other capital investments that would have occurred.

[39] *Gold and Cassidy, supra.*

C. The Economy is Already Improving

The Argument

Finally, the article contends that the current law rules allow more than a year for employers to meet their funding obligations. However as with the other assertions, this relies on several related implicit assumptions. The assumptions are that the (1) the economic recovery will occur swiftly and improve (uniformly) the financial situation for those firms making contributions, and (2) job recovery will correspond with the overall economic recovery. As discussed below, these assumptions are not supported by the facts.

The Economic Reality

What is the timeline for economic recovery? The final argument suggests that because the pension obligations allow for contributions to be made in 2010 and later, the impact on the contributing firms will not pose a burden. This argument assumes that the economy recovers fully by the time employers must meet these funding obligations. However, all signs indicate that recovery in 2010 is overly optimistic.

In an update on the economy in February 2009, Congressional Budget Office (CBO) Director Douglas Elmendorf predicted a slow recovery, a prediction that has proven true:

> The economic recovery is likely to be slow and protracted. Often, sharp contractions in economic activity are followed by rapid rebounds, but CBO's forecast anticipates that recovery will be slow in 2010 for four principal reasons: restrained lending to households and businesses as the damage to the financial system outweighs the sharp easing in monetary policy; a slow rebound in housing construction; the effect of large losses of wealth in weighing down households' spending; and the weakness of foreign demand. Although financial conditions are expected to improve, the pace of improvement will not be quick. It will take time for financial institutions to recover from losses due to loan defaults, and lenders are likely to be more cautious following a severe financial crisis than following a typical (that is, less severe) recession. As a result, borrowers will continue to find the terms and availability of credit tight, which will hold back the growth of investment and consumption. The excess supply of vacant houses is expected to dampen the rebound in housing construction next year compared with usual cyclical rebounds. Spending also will be reduced as households continue to react to the dramatic declines in wealth of the past few years. Last, foreign economies will not provide an offsetting boost in demand: Although economic growth overseas remained strong during the housing collapse of 2007 and 2008, providing support to U.S. producers, those economies have now weakened considerably and are likely to restrain the U.S. recovery in 2010.[40]

[40] *The State of the Economy and Issues in Developing an Effective Policy Response.* Statement of Douglas W. Elmendorf, Director, before the Committee on the Budget, U.S. House of Representatives. Congressional Budget Office, January 27, 2009.

On August 21, 2009, in a speech to World Central Bankers, Federal Reserve Chairman Ben Bernanke indicated that he believed the recession was drawing to a close, but that the path to recovery would be a difficult one. He predicted that unemployment in the United States and around the world was likely to remain high for another year.[41]

However, the recession creates funding problems for defined benefit plans from two important sources – markedly lower asset values and precipitously higher liabilities.[42] Even if the assets largely recover, higher pension plan contribution requirements will continue until the central banks allow interest rates to return to more normal levels. Because interest rates for funding purposes in the U.S. are generally averaged over time, the negative impact on pension plan funding could last several years beyond central bank decisions to raise interest rates.

In addition, numerous economists predict that the world economy could face a "double dip" recession when countries begin to withdraw their fiscal stimulus programs.[43] Most notably, Nouriel Roubini, the economist who predicted the financial crisis as well as the recession, continues to voice caution about the ability of countries to sustain the recent economic growth after fiscal stimulus programs end.[44]

What happens with unemployment rates when the economy does recover?

A fundamental issue is whether the economic recovery will bring an immediate reversal of the high unemployment rates in the United States. For a variety of reasons, many economists believe that high employment will continue to be a problem for the U.S. economy. It is generally accepted that recovery in employment levels tends to lag recovery in economic output after a recession ends.

In September 2009, 263,000 jobs were lost in the U.S. economy and the unemployment rate rose to 9.8 percent.[45] Since the beginning of the recession in December 2007, the number of unemployed persons has risen to 15.1 million, the unemployment rate has doubled, and payroll employment has fallen by 7.2 million workers.

The Federal Reserve Bank of San Francisco (San Francisco Fed) published a recent paper suggesting that the unemployment rate could peak at around 11 percent in mid-2010 and remain above 9 percent through 2011.[46] The San Francisco Fed cites the fact that the share of workers who have been laid off temporarily, rather than permanently, is at very low levels and the

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[41] New York Times, Edmund Andrews, "World Bankers Suggest Rebound May be Underway," August 22, 2009.

[42] The decrease in asset values is a direct result of the financial market crisis. The increase in liabilities is a direct result of the low interest rates maintained by central banks that are intended to help turn the recession into recovery.

[43] See the Wall Street Journal, Elizabeth Behrmann, "Dr. Doom Sees Double-Dip Recession Risk, in Remarks Down Under," August 3, 2009 as well as the IMF Finance and Development, Olivier Blanchard, "Sustaining a Global Recovery," September, 2009.

[44] Mihm, Stephen. *Dr. Doom.* New York Times Sunday Magazine, August 15, 2008. Available at. www.nytimes.com/2008/08/17/magazine/17pessimist-t.html.

[45] *The Employment Situation -- September 2009.* Bureau of Labor Statistics News Release, October 2, 2009.

[46] *Jobless Recovery Redux?* Federal Reserve Bank of San Francisco, FRBSF Economic Letter, 2009-18, June 5, 2009.

number of workers who are involuntarily employed part-time is at all time highs. Both of these factors are likely to slow significantly the recovery of employment to pre-recession levels.

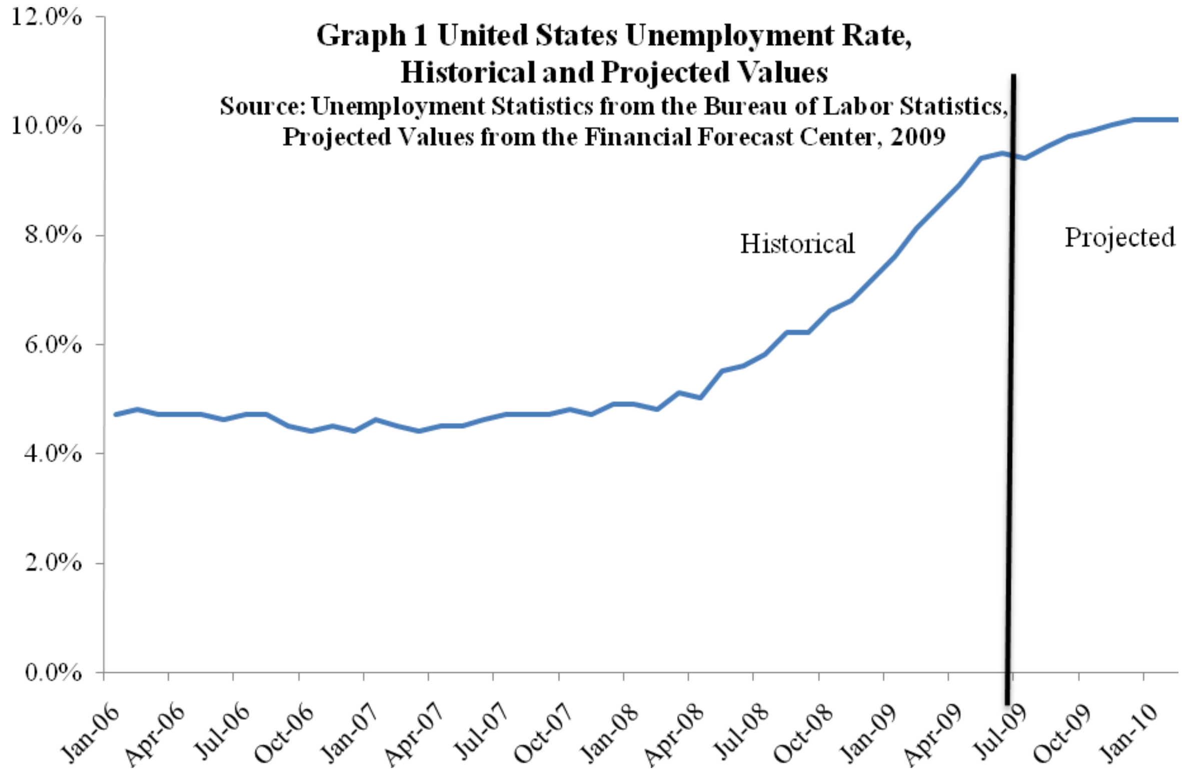
The San Francisco Fed goes on to state that "the level of labor market slack would be higher by the end of 2009 than experienced at any other time in the post-World War II period, implying a longer and slower recovery path for the unemployment rate. This suggests that, more than in previous recessions, when the economy rebounds, employers will tap into their existing workforces rather than hire new workers. This could ... put upward pressure on future unemployment rates."[47]

In an October 13, 2009, speech at the National Association for Business Economics, Vice Chairman of the Federal Reserve Board Donald L. Kuhn stated "the employment situation remains quite weak … while the unemployment rate has not been rising as rapidly since midyear as it did over the preceding year, it could well reach 10 percent by early 2010. The difficult conditions in labor markets and the consequent implications for household incomes are important reasons for my expectation that the recovery in overall economic activity moving into next year will be restrained."[48]

Vice Chairman Kuhn goes on to note that businesses have been responding to the current economic situation by "aggressively cutting costs not only by eliminating jobs, but also by cutting back increases in labor compensation."[49] One measure of employment costs – nominal hourly compensation for the nonfarm business sector – actually fell at an annual rate of 2¼ percent during the first half of 2009.[50]

Thus, despite short-term signs that the rate of layoffs is slowing, the United States is still shedding jobs at a record rate. Graph 3 presents the actual historical unemployment rates as well as forecasted unemployment through the first quarter of 2010.

[47] *Id.*
[48] *The Economic Outlook.* A Speech by Vice Chairman Donald L. Kuhn at the National Association for Business Economics, St. Louis, Missouri, October 13, 2009.
[49] *Id.*
[50] *Id.*



The last two economic downturns in 1991 and 2001 resulted in what some have called "a jobless recovery" in which employment levels did not return to their pre-recession levels. The San Francisco Fed finds that the current economic recovery shows similar signs to the 1991 and 2001 jobless recoveries, a view that is shared by many economists. [51] This report indicates that the current labor market is characterized by a high degree of involuntary part-time workers as well as a low degree of temporary layoffs. This indicates that as the economy creates jobs, there will be a movement from part-time to full-time for many workers, rather than new hiring for newly created jobs. In addition, the low rates of temporary layoffs indicate a slow transition to employment as workers retrain and relocate. According to this report, these changes in structural unemployment coupled with the recession create a pessimistic climate for job growth.

In an update on the economic outlook in August 2009, Elmendorf discusses the particular problems related to the recovery in employment:

> However, the recovery in employment also could be slower than anticipated, because many of the jobs lost in certain industries—including construction, financial services, and those related to the manufacture and distribution of automobiles—are unlikely to return even when the economy recovers. Many displaced workers in those industries will need to retrain and in some cases relocate in order to find new work—a process that takes time. Ongoing

[51] *FRBSF Economic Letter, supra.*

> dislocations in the housing market also could delay the needed adjustments by making relocating more difficult.[52]

The global market for labor presents an additional challenge to the economic recovery. One analyst points out that job recovery after the current recession could be slower than that experienced during the 2001-2003 recession because jobs will continue to be outsourced outside the United States to lower cost areas.[53] Dr. Fred Maidment notes that "many of these jobs will not return, which will slow the coming of the eventual economic recovery."[54] In addition, if these jobs do not return to the United States, U.S. employment figures are likely to lag pre-recession levels even longer into the future.

Additional shocks to employment levels have the potential to further slow the economic recovery. Such shocks are likely to occur as employers who maintain defined benefit pension plans lay off more employees in order to make the substantial and unanticipated contributions that could be required under current law. Those who suggest that the capital markets will immediately respond by providing new jobs in other sectors of the economy fail to take into account the complexities and challenges facing the U.S. economy.

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[52] *The Budget and Economic Outlook: An Update.* Congressional Budget Office, August 2009.
[53] Maidment, Fred. *Offshoring May Slow Impending U.S. Economic Recovery.* Graziadio Business Report. A Journal of Relevant Information and Analysis. Pepperdine University Graziadio School of Business and Management. 2009, Volume 12, Issue 3.
[54] *Id.*

V. What Will Happen to Workers Covered Under Defined Benefit Plans?

Research suggests that the increases in defined benefit plan funding obligations that will occur in 2010 and 2011 will have serious ramifications for the employers who maintain these plans and for the employees who work for these employers.

The 2008 CRR paper states that "the financial crisis could force some companies to lay off workers, push some plan sponsors into bankruptcy, or persuade some healthy companies that no longer want to bear this type of financial risk to freeze their plan." Under each of these scenarios, employees face serious consequences of these actions.

Because of the projected increases in defined benefit plan funding requirements, employees who work for employers with defined benefit plans face a higher risk of being laid off than workers in other firms. In addition to the devastating impact of unemployment in the current economic climate, an employee who loses his or her job will likely have a gap in his or her working career during which no retirement savings are being accumulated. If the employee finds another job, it is statistically likely that the employee will not be eligible to participate in a defined benefit plan of the new employer.

Employees participating in a 401(k) plan are also feeling the impact of the financial crisis and economic recession as many employers have eliminated or reduced the employer matching contributions to the plans.[55] According to the International Foundation of Employee Benefit Plans, many employers viewed eliminating the matching contributions as a necessary step to avoid layoffs or as a necessary step to remain in business.[56] Watson Wyatt conducted a survey of Fortune 1000 firms in early 2009. They found that 22 percent of those surveyed indicated that they had suspended their matching contributions.[57]

If the employer goes bankrupt, in addition to losing his or her job, the employee will only be entitled to benefits under the defined benefit plan up to the amount guaranteed by the PBGC (or the amount that can be provided with plan assets, if greater). The employee faces the same uncertain job market and the likelihood of a gap in retirement savings accumulations. If the employer freezes the defined benefit plan to limit overall liability for benefits, the employee is only entitled to benefits accrued up to the date the plan is frozen.

The challenges facing workers who lose their jobs in the current economy should not be minimized. Even under robust economic conditions, workers who lose their jobs, particularly those who lose jobs in industries in which the job losses may be permanent, face gaps in employment. During these gaps in employment, it is unlikely that these workers will be able to

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[55] Workforce Management, "More Employers Halt 401(k) Matches as Recession Hits," December 9, 2008.
[56] Comments by Julie Stitch, Senior Information/Research Specialist at the International Foundation of Employee Benefit Plans, in Brookfield, Wisconsin, reported online by Workforce Management.
[57] Watson Wyatt Insider, "Economic Crisis Prompts Many Companies to Suspend Contributions to Employee Savings Plans," April 2009.

save for retirement, which reduces their future retirement security. Further, and also troubling, these workers may be forced to tap into their existing retirement savings in order to meet current consumption needs.

Groshen and Potter (2003) address some of the difficulties facing unemployed workers during the start of an economic recovery. "At the start of any recovery, many employers will delay hires or recalls for a time to be certain that the increase in demand will continue." [58] As a result of this firm behavior, it is well established that improvements in employment levels tend to lag other economic indicators during a recovery.

If the economic recovery is "jobless," which some economists suggest is likely, the situation becomes even more difficult for workers. Groshen and Potter also discuss these difficulties:

> "The largely permanent nature of this recession's job losses could explain why jobs have been so slow to materialize. An unusually high share of unemployed workers must now find new positions in different firms or industries. The task of finding such jobs, difficult and time-consuming under the best of conditions, is likely to be even more complicated now, when financial market weakness and economic uncertainty prevail. In such an environment, firms may hesitate to create new jobs because of the risks involved in expanding their businesses or undertaking new ventures."[59]

[58] Groshen, Erica L. and Simon Potter. *Has Structural Change Contributed to a Jobless Recovery?* Current Issues in Economics and Finance, Federal Reserve Bank of New York, Volume 9, Number 8, August 2003.
[59] *Id.*

VI. Other Countries Have Recognized the Need to Give Companies More Time to Address Funding Shortfalls

The meltdown of the financial markets caused problems for defined benefit plans around the world similar to those faced by plans in the United States. Some countries have addressed these problems head-on.

In Ireland, the Minister for Social and Family Affairs announced funding relief for defined benefit pension plans on December 19, 2008.[60] In her statement announcing the relief, Minister Hanafin stated "the current significant pressures on pension schemes which reflect the impact of unprecedented developments in worldwide financial markets are a particular concern."[61] The funding relief was intended to enable defined benefit pension schemes in Ireland to "better cope with recent investment losses."[62]

Canada has also provided temporary relief from defined benefit plan funding requirements. On June 12, 2009, the Minister of Finance announced the implementation of new regulations to provide temporary "solvency funding relief" for certain Canadian defined benefit plans.[63] According to the Minister's press release, "these measures will help protect pension benefits while allowing companies more flexibility in meeting their pension obligations." The regulatory impact analysis statement that accompanied the Canadian regulations stated "the current economic environment is placing significant stress on many plan sponsors, who could affect the viability of defined benefit pension plans and benefit security. The relief that will be provided ... recognises the potentially negative impact of funding pension deficiencies on the sponsor."[64]

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60 *Hanafin moves to ease pressures on defined benefit pension schemes.* Press Release, December 19, 2008. http://www.welfare.ie/EN/Press/PressReleases/2008/Pages/pr191208.aspx

61 *Id.*

62 *Id.*

63 *Minister of Finance Announces Coming Into Force of Pension Solvency Regulations.* Department of Finance Canada. News Release 2009-059, June 12, 2009.

64 *Solvency Funding Relief Regulations, 2009.* Regulatory Impact Analysis Statement. Department of Finance Canada. News Release 2009-059, June 12, 2009.

VII. Conclusions

The potential increase in pension funding obligations will have a negative effect on aggregate job creation in the economy. The timing of a full economic recovery is still uncertain, but economists believe that the recovery could be jobless and that unemployment levels will continue to rise into 2010 and will remain high well into 2011. In this environment, it is naïve to expect that job losses from employers that sponsor defined benefit plans will be made up in other sectors of the economy.

Furthermore, the potential increase in funding obligations will have significant deleterious effects on the affected companies, resulting in long-term ramifications for those industries in which defined benefit plans have been the primary form of retirement plan. Requiring employers to increase their funding to defined benefit plans during a recession leads to layoffs, bankruptcies, and the freezing of defined benefit plans, suggesting that the pension funding obligations could fundamentally alter the distribution of jobs in the economy based upon what industries have made long-standing commitments to defined benefit plans.

In addition, the challenges facing workers who lose their jobs in the current economy should not be minimized. Even under robust economic conditions, workers who lose their jobs face gaps in employment during which workers are unlikely to save for retirement and may even tap their existing retirement savings in order to meet current consumption needs.