November 14, 2008

To: Business Roundtable Pension Working Group

From: Robert F. Wescott, Ph.D., Keybridge Research LLC

Subject: Macroeconomic Effects of Stock Market Meltdown and New Rules Under Pension Protection Act of 2006.

New defined-benefit pension plan rules under the Pension Protection Act of 2006 and the current meltdown in the global equity markets are combining to force U.S. companies to make large additional pension funding contributions. These additional contributions are likely to be required at the worst possible moment from a U.S. macroeconomic point of view and to result in a deeper and more prolonged U.S. recession in 2009 and maybe 2010 than would otherwise be the case. Furthermore, job losses are likely to greater and the unemployment rate is likely to be higher because of these new pension funding rules.

For many years we have studied the effects of defined-benefit plan accounting rules on the U.S. economy and on plan funding status. In a 2005 study entitled "Pension Smoothing Changes Would Worsen Job Losses in Recessions" we found academic support for the view that there would be strong negative interactions between pension plan contributions and capital investment spending—exactly the type of interactions that could take place in 2009 and 2010 if equity markets remain depressed. In an article in the highly respected Journal of Finance, for example, Prof. Joshua Rauh of the Graduate School of Business at the University of Chicago found that for each extra dollar of required pension contribution, businesses with defined-benefit pension plans cut back on their investment spending by 60 to 70 cents." More than 350 of the Fortune 500 firms maintain defined-benefit pension plans and financial analysts have recently calculated that even if U.S. equity markets rebound some in 2009, these corporations may have to contribute \$100 billion or more to their plans in the next few years. Such pension contributions could serve to reduce investment spending by \$60 to \$70 billion or by 4 to 5 percent of total business investment. Such reductions in investment spending would have multiplied effects on the overall economy and would likely result in the loss of tens of thousands of payroll jobs. iii

The global financial meltdown has brought a sharp escalation of risk premiums around the world and a surge in yields on corporate bonds. These yields are key determinants of defined-pension plan liabilities and as these yields have soared there has been a temporary reduction in plan liabilities that some may point to as an ameliorating factor. However, record spreads between corporate bond yields and government bond yields are virtually certain to unwind in coming months and quarters. As corporate bond yields return to more normal levels, calculated defined-pension plan liabilities can be expected to spike sharply upward and trigger large required additional contributions.

It is of course important for pension plans to adequately fund their long-term obligations. Our 2005 study demonstrated that long smoothing periods can play a critical role in helping to maintain healthy funding levels while at the same time minimizing disruptive pro-cyclical macroeconomic tendencies.

i See Robert F. Wescott, "Pension Smoothing Charges Would Worsen Job Losses in Recessions," An analysis for the Business Roundtable Pension Study Group, February 28, 2005. This study benefited from review and comments by Prof. Deborah J. Lucas, Finance Department, Kellogg Graduate School of Management, Northwestern University, and Prof. Stephen P. Zeldes of Columbia University's Graduate School of Business.

See Joshua Rauh, "Investment and Financing Constraints: Evidence from Funding Corporate Pension Plans," *Journal of Finance*, 2006.

The 2005 study included macroeconomic simulation analysis of pension accounting rule changes with the University of Maryland's INFORUM Model of the U.S. economy.