Effect of the 1987 Stock Market Decline on Selected Large Pension Plans

Statement of
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Committee on Ways and Means
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SUMMARY

Private pension plans are an important source of retirement income promised to millions of retired and working Americans. Plan assets increased substantially in recent years before 1987 largely due to the extensive growth of the stock market. During October 1987, however, the stock market declined significantly, culminating on October 19, when the Dow plunged a record 508 points (23 percent).

GAO answered three questions concerning how the 1987 stock market decline affected 174 large pension plans.

How did the decline affect the plans' assets?

The total asset value of the surveyed plans decreased substantially ($34.5 billion) during the last quarter of 1987, when the stock market decline occurred. However, the decreases were more than offset by significant gains ($51.5 billion) during the first 9 months of the year, not to mention the enormous increase in plan assets from 1982 through 1986. Most plans experienced increases in asset values for the year, and total plan assets gained about 6 percent.

Was there a relationship between the proportion of plan assets invested in stock and changes in asset value?

With some significant exceptions, the asset increases and decreases in surveyed plans during 1987 were related to the proportion of assets in stock, and the rise and fall of the stock market. The exceptions to the relationship strongly suggest that other factors, such as asset diversification, the quality of individual investments, and the timing of buy and sell transactions, also affected plan asset increases and decreases.

How did defined benefit and defined contribution plans fare during the market decline?

Most defined benefit and defined contribution plans we surveyed fared about the same—increasing in asset value when the market was rising, decreasing when the market declined, and increasing for the year. However, for the year, a larger percentage of the defined contribution plans had asset decreases, and their asset changes were more volatile and dispersed. The poorest performing defined contribution plans lost more than the poorest performing defined benefit plans, but the best performing defined contribution plans gained more than the best performing defined benefit plans.
Mr. Chairman and Members of the Subcommittee:

I am pleased to be here today to discuss the results of our analysis of how the October 1987 stock market decline affected the value of assets of a selected group of large pension plans.

BACKGROUND

Private pension plans are an important source of retirement income promised to millions of retired and working Americans. The financial position of pension benefits has improved significantly in recent years, largely due to an enormous increase in plan assets. From 1982 through 1986, total plan assets reportedly doubled. By 1987, there were about $1.6 trillion in pension plan assets, and most defined benefit plans (benefits based on such factors as compensation and years of service) had more assets than needed to pay for earned benefits.

The Employee Retirement Income Security Act (ERISA) established requirements to help prevent large losses of pension plan assets. Generally, ERISA's fiduciary provisions require diversified investment of plan assets to help minimize losses, but certain defined contribution plans (benefits based on the amount in a participant's account) are exempt from the requirements. The exempt plans include those designed to invest primarily in the securities of the sponsoring employer, such as stock bonus and employee stock ownership plans.

ERISA's diversification provisions allow plan officials substantial investment flexibility. The provisions require plan
assets to be invested prudently, but generally do not specify the degree of diversification required. For plans subject to the diversification provisions, ERISA prohibits the investment of more than 10 percent of plan assets in the sponsoring employer's securities.

A major factor contributing to the increase in pension assets was the extensive growth of the stock market. The Dow Jones Industrial Average, an often-used indicator of the stock market's performance, more than doubled from 875 points at the beginning of 1982 to 1,927 points at the end of 1986.

During the first 8 months of 1987, the stock market's value, as measured by the Dow, continued to grow--increasing by almost 800 points, to an all time high of 2,722. By October 1, however, the Dow had dropped by 126 points, and it fell another 350 points during the first 18 days of October. The decline culminated on October 19, when the Dow plunged a record 508 points (23 percent)--comparable, in percentage terms, only to the October 1929 stock market crash. During the first 19 days of October, the Dow lost about 34 percent of its total value--almost $1 trillion.

OBJECTIVES, SCOPE AND METHODOLOGY

Mr. Chairman, you and the Chairman and other members of the Senate Committee on Governmental Affairs expressed concern about the potential adverse effects the stock market decline had on pension plans, and asked us to look into the matter. In
response to these requests, we reviewed the calendar year 1987 investments of selected plans with large amounts of assets.

Our objectives were to ascertain (1) how the 1987 stock market decline affected the plans' assets, (2) whether there was a relationship between the proportion of funds invested in stock and the changes in the plans' asset values, and (3) how defined benefit and defined contribution plans fared during the market decline.

We focused on private employers and unions that sponsored plans with large amounts of assets because they (1) included a large portion of total pension assets and (2) covered a large number of participants. By telephone, we attempted to obtain information on the largest defined benefit and defined contribution plans maintained by 117 private plan sponsors having the largest amount of pension assets.

We obtained information from officials representing 174 plans sponsored by 92 private employers and unions. As of December 31, 1987, the 174 plans had total assets of about $300 billion, or about 19 percent of all private pension assets. The plans included 89 defined benefit plans with $229 billion in assets and 6.4 million participants, and 85 defined contribution plans with $70 billion in assets and 2.75 million participants.

We obtained information on each plan's assets as of January 1, September 30, and December 31, 1987. We adjusted reported plan assets for contributions and distributions made during the year to minimize their effect on analyses of asset value changes.
We also obtained plan officials' views on the effect of the stock market decline on their plans. Our findings apply only to the plans we surveyed and should not be generalized beyond these large plans.

ASSET DECREASES DURING MARKET DECLINE
MORE THAN OFFSET BY EARLIER GAINS

Overall, the total assets of the 174 plans decreased by about $34.5 billion (10.3 percent) during the fourth quarter of 1987, but still increased by $17.1 billion (6 percent) for the year. Although the assets of 158 plans decreased during the fourth quarter, 154 increased in value for the year. For the year, the percentage increase in the plans' total assets exceeded the gains of two often-used stock indices. The Dow increased by less than 1 percent for 1987, and the Standard & Poor's 500 index, a broader measure of the stock market's performance, gained 2 percent.

There are several reasons why the plans were not more seriously affected by the stock market decline. The primary reason is that plans' total assets increased by $51.5 billion (18.3 percent) during the first 9 months of 1987. Of the plans we surveyed, 168 had increases during this period, with 117 gaining more than 15 percent.

Another reason was that most plans diversified their assets among investments other than stock. On September 30, 139 plans had at least 30 percent of their portfolio in assets other than
stock, with 110 having 40 percent or more in other assets. The average asset portfolio on September 30 was about

-- 56 percent in stock,
-- 19 percent in bonds,
-- 14 percent in cash and equivalents, and guaranteed investment contracts (a fixed income investment that provides a fixed rate of interest), and
-- 11 percent in other investments, such as real estate, mortgages and mortgage-backed securities, and annuities.

Pension plans have often been associated with the use of hedging devices, such as options and futures, to minimize the risk of large losses. However, information provided by plan officials indicates that this was not the case for most plans that we surveyed. Of the 174 plans, 25 (about 14 percent) had assets in hedging devices on September 30—just before the stock market crash. All but one of the hedged plans were defined benefit plans.

Representatives of the 25 hedged plans had different views on the extent to which the hedging devices limited their losses during the stock market crash. One-third of them said that hedging had a moderate to very significant effect on limiting their losses, but the other two-thirds said that the impact of hedging was, at best, minor.

The stock market’s partial recovery by December 31 also helped mitigate the decline’s effect on plan assets for the
year. Between October 19 and the end of the year, the Dow rose by 200 points. It is likely that the plans we surveyed benefited from the partial recovery because they continued to hold large portions of their assets in stock. Nine out of 10 plans told us they did not change their investment policy (most of which included investment in stock) as a result of the crash. As of December 31, 1987, the 174 plans still had about 47 percent of total assets in stock.

**Asset Changes Generally Related to Stock Holdings**

Generally, the plans that had a majority of their assets in stock on January 1 gained more in asset value during the first 9 months of 1987, when the stock market was rising, than plans with small proportions in stock. For example, most plans with a majority of their assets in stock at the start of the year had asset increases greater than 15 percent during the first 9 months. In contrast, about half of the plans with a minority of their assets in stock had increases of 15 percent or less.

There were, however, some significant exceptions to this pattern. At one extreme, a plan with about 98 percent of its assets in stock on January 1 experienced a 26-percent decline in asset value by September 30, while two plans with less than 20 percent of their assets in stock experienced increases of slightly more than 20 percent.

During the fourth quarter, when the stock market decline occurred, plans with a majority of their assets invested in stock
had greater asset decreases than plans with small proportions in stock. For example, two-thirds of the plans with a majority of their assets in stock on September 30 had asset decreases of more than 10 percent by December 31. One increased in asset value during the quarter. On the other hand, two-thirds of the plans with a minority of their assets in stock had asset decreases of 10 percent or less, and the other one-third had increases up to 5 percent.

Again there were some significant exceptions to the pattern. For example, two plans with more than 60 percent of their assets in stock lost less than 2 percent in asset value during the quarter. One plan with 36 percent of its assets in stock lost about 16 percent in asset value.

The exceptions to the pattern of asset changes and the stock market's performance in the first 9 months and the fourth quarter of 1987 are not surprising. Such factors as the diversification of investment portfolios, the quality of individual investments, and the timing of buy and sell transactions can greatly influence performance. These factors were also working to affect plan asset values during 1987.
DEFINED CONTRIBUTION PLANS' PERFORMANCE VARIED MORE WIDELY THAN DEFINED BENEFIT PLANS'  

Changes in plan assets affect employers and participants differently for defined benefit and defined contribution plans. In defined benefit plans, employers' promises are generally framed in terms of the benefit to be paid. Employers are responsible for ensuring that there are sufficient assets to pay these promised benefits; they bear the risk of investment losses and realize the benefits of gains. In defined contribution plans, employers' promises are generally limited to making contributions to the plan. Plan participants bear the risk of investment losses and realize the benefits of investment gains.

During the fourth quarter of 1987, 83 of the 89 defined benefit plans had decreases in asset value of up to 19 percent. The largest gain for the 6 plans that had increases in asset value was 5 percent for the quarter. For the year, however, 86 of the defined benefit plans had increases in asset value ranging up to 27 percent. Only the three plans that had asset decreases (from 2 to 7 percent) ended up with slightly less assets to cover benefits owed.

Of the 85 defined contribution plans surveyed, 75 had asset decreases during the fourth quarter ranging up to 27 percent, with the other 10 having asset gains of up to 5 percent. For the year, 68 of the defined contribution plans had gains ranging up to 45 percent, with the remaining 17 plans having decreases of up to 35 percent. (Attachment 1 shows the percentage change in
assets for the year for the surveyed defined benefit and defined contribution plans.)

The value of a participant's benefit in a defined contribution plan generally fluctuates with changes in plan assets. The wide range of the asset increases and decreases experienced during the year by the plans we surveyed demonstrates that participants' benefit values can rise and fall sharply within a short period.

For example, one plan's assets increased 28 percent in the first 9 months of the year, but decreased 27 percent during the fourth quarter and 6 percent for the year. Another plan's assets increased 86 percent in the first 9 months, decreased 23 percent in the last quarter, and were up 44 percent for the year.

**CONCLUDING OBSERVATIONS**

The total asset value of the surveyed plans decreased substantially during the last quarter of 1987, when the stock market decline occurred. However, the decreases were more than offset by gains during the first 9 months of the year, with most plans experiencing increases in asset values for the year. Also, plans' total investments performed better, on the average for the year, than often-used stock indices. The extensive growth in the stock market from 1982 through 1986 likely had a much greater impact on increasing plan assets than the October 1987 stock market decline had on reducing them.
With some significant exceptions, the asset increases and decreases in surveyed plans during the year were related to the proportion of assets in stock, and the rise and fall of the stock market. The exceptions to the relationship strongly suggest that other factors, such as asset diversification, the quality of individual investments, and the timing of buy and sell transactions, also affected plan asset increases and decreases.

Most defined benefit and defined contribution plans we surveyed fared about the same—gaining in asset value in the first 9 months of 1987, declining during the fourth quarter when the market decline occurred, and increasing in asset value for the year. However, for the year, a larger percentage of the defined contribution plans had asset decreases. As a whole, the asset changes of defined contribution plans were more volatile and dispersed than defined benefit plans. The poorest performing defined contribution plans lost more than the poorest performing defined benefit plans, but the best performing defined contribution plans gained more than the best performing defined benefit plans.

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Mr. Chairman, this completes my statement. I would be happy to answer any questions at this time.
Percent Change in Assets of Defined Benefit and Defined Contribution Pension Plans (January to December, 1987)